

SECTION **AV**

AUDIO, VISUAL & NAVIGATION SYSTEM

CONTENTS

<b>BASE AUDIO WITHOUT NAVIGATION</b>	System Description .....	19	F
<b>BASIC INSPECTION</b> .....	Component Parts Location .....	20	G
<b>DIAGNOSIS AND REPAIR WORK FLOW</b> .....	Component Description .....	21	H
Work Flow .....	<b>REAR VIEW MONITOR SYSTEM</b> .....	22	I
<b>INSPECTION AND ADJUSTMENT</b> .....	System Diagram .....	22	J
<b>ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL</b> .....	System Description .....	22	K
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description ....	Component Parts Location .....	23	L
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement .....	Component Description .....	23	M
<b>ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT</b> .....	<b>DIAGNOSIS SYSTEM (AV CONTROL UNIT)</b> ...	25	
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description .....	Diagnosis Description .....	25	
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement ....	CONSULT - III Function (MULTI AV) .....	34	
<b>REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT</b> .....	<b>DTC/CIRCUIT DIAGNOSIS</b> .....	37	
REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Description .....	<b>U1000 CAN COMM CIRCUIT</b> .....	37	
REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement .....	Description .....	37	
<b>SYSTEM DESCRIPTION</b> .....	DTC Logic .....	37	
<b>MULTI AV SYSTEM</b> .....	Diagnosis Procedure .....	37	
System Diagram .....	<b>U1010 CONTROL UNIT (CAN)</b> .....	38	
System Description .....	Description .....	38	
Component Parts Location .....	DTC Logic .....	38	
Component Description .....	Diagnosis Procedure .....	38	
<b>AUDIO SYSTEM</b> .....	<b>U1310 AV CONTROL UNIT</b> .....	39	
System Diagram .....	Description .....	39	
	DTC Logic .....	39	
	<b>U1200 AV CONTROL UNIT</b> .....	40	
	Description .....	40	
	DTC Logic .....	40	
	<b>U1216 AV CONTROL UNIT</b> .....	41	
	Description .....	41	
	DTC Logic .....	41	
	<b>U1243 DISPLAY UNIT</b> .....	42	
	Description .....	42	
	DTC Logic .....	42	
	Diagnosis Procedure .....	42	

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV

<b>U1250 CAMERA CONTROL UNIT</b> .....	<b>44</b>	<b>AUX IMAGE SIGNAL CIRCUIT</b> .....	<b>59</b>
Description .....	44	Description .....	59
DTC Logic .....	44	Diagnosis Procedure .....	59
Diagnosis Procedure .....	44		
<b>U1255 SATELLITE RADIO TUNER</b> .....	<b>45</b>	<b>COMPOSITE IMAGE SIGNAL CIRCUIT</b> .....	<b>60</b>
Description .....	45	Description .....	60
DTC Logic .....	45	Diagnosis Procedure .....	60
Diagnosis Procedure .....	45		
<b>U1300 AV COMM CIRCUIT</b> .....	<b>47</b>	<b>CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)</b> .....	<b>61</b>
Description .....	47	Description .....	61
		Diagnosis Procedure .....	61
<b>POWER SUPPLY AND GROUND CIRCUIT</b> ....	<b>48</b>		
<b>AV CONTROL UNIT</b> .....	<b>48</b>	<b>CAMERA IMAGE SIGNAL CIRCUIT (CAMERA CONTROL UNIT TO AV CONTROL UNIT)</b> .....	<b>63</b>
AV CONTROL UNIT : Diagnosis Procedure .....	48	Description .....	63
		Diagnosis Procedure .....	63
<b>DISPLAY UNIT</b> .....	<b>48</b>		
DISPLAY UNIT : Diagnosis Procedure .....	48	<b>DISK EJECT SIGNAL CIRCUIT</b> .....	<b>64</b>
		Description .....	64
<b>MULTIFUNCTION SWITCH</b> .....	<b>49</b>	Diagnosis Procedure .....	64
MULTIFUNCTION SWITCH : Diagnosis Procedure .....	49		
		<b>COMMUNICATION SIGNAL CIRCUIT (CONT-SAT)</b> .....	<b>65</b>
<b>CAMERA CONTROL UNIT</b> .....	<b>50</b>	Description .....	65
CAMERA CONTROL UNIT : Diagnosis Procedure .....	50	Diagnosis Procedure .....	65
<b>SATELLITE RADIO TUNER</b> .....	<b>51</b>	<b>REQUEST SIGNAL CIRCUIT (SAT→CONT)</b> ...	<b>67</b>
SATELLITE RADIO TUNER : Diagnosis Procedure .....	51	Description .....	67
		Diagnosis Procedure .....	67
<b>RGB (R: RED) SIGNAL CIRCUIT</b> .....	<b>52</b>		
Description .....	52	<b>STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT</b> .....	<b>68</b>
Diagnosis Procedure .....	52	Description .....	68
		Diagnosis Procedure .....	68
<b>RGB (G: GREEN) SIGNAL CIRCUIT</b> .....	<b>53</b>		
Description .....	53	<b>STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT</b> .....	<b>70</b>
Diagnosis Procedure .....	53	Description .....	70
		Diagnosis Procedure .....	70
<b>RGB (B: BLUE) SIGNAL CIRCUIT</b> .....	<b>54</b>		
Description .....	54	<b>STEERING SWITCH SIGNAL A CIRCUIT</b> .....	<b>72</b>
Diagnosis Procedure .....	54	Description .....	72
		Diagnosis Procedure .....	72
<b>RGB SYNCHRONIZING SIGNAL CIRCUIT</b> .....	<b>55</b>	Component Inspection .....	72
Description .....	55		
Diagnosis Procedure .....	55	<b>STEERING SWITCH SIGNAL B CIRCUIT</b> .....	<b>74</b>
		Description .....	74
<b>RGB AREA (YS) SIGNAL CIRCUIT</b> .....	<b>56</b>	Diagnosis Procedure .....	74
Description .....	56	Component Inspection .....	74
Diagnosis Procedure .....	56		
<b>HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT</b> .....	<b>57</b>	<b>STEERING SWITCH SIGNAL GND CIRCUIT</b> ...	<b>76</b>
Description .....	57	Description .....	76
Diagnosis Procedure .....	57	Diagnosis Procedure .....	76
		Component Inspection .....	76
<b>VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT</b> .....	<b>58</b>		
Description .....	58	<b>ECU DIAGNOSIS INFORMATION</b> .....	<b>78</b>
Diagnosis Procedure .....	58	<b>AV CONTROL UNIT</b> .....	<b>78</b>

Reference Value .....	78	<b>TWEETER .....</b>	<b>158</b>	
Wiring Diagram - BASE AUDIO WITHOUT NAVI- GATION SYSTEM - .....	84	Exploded View .....	158	A
DTC Index .....	97	Removal and Installation .....	158	
<b>DISPLAY UNIT .....</b>	<b>99</b>	<b>ANTENNA BASE .....</b>	<b>159</b>	B
Reference Value .....	99	Exploded View .....	159	
Wiring Diagram - BASE AUDIO WITHOUT NAVI- GATION SYSTEM - .....	101	Removal and Installation .....	159	
<b>SATELLITE RADIO TUNER .....</b>	<b>115</b>	<b>SATELLITE RADIO TUNER .....</b>	<b>160</b>	C
Reference Value .....	115	Exploded View .....	160	
Wiring Diagram - BASE AUDIO WITHOUT NAVI- GATION SYSTEM - .....	116	Removal and Installation .....	160	
<b>CAMERA CONTROL UNIT .....</b>	<b>130</b>	<b>MULTIFUNCTION SWITCH .....</b>	<b>161</b>	D
Reference Value .....	130	Exploded View .....	161	
Wiring Diagram - BASE AUDIO WITHOUT NAVI- GATION SYSTEM - .....	132	Removal and Installation .....	161	E
<b>SYMPTOM DIAGNOSIS .....</b>	<b>146</b>	<b>PRESET SWITCH .....</b>	<b>162</b>	F
<b>MULTI AV SYSTEM SYMPTOMS .....</b>	<b>146</b>	Exploded View .....	162	
Symptom Table .....	146	Removal and Installation .....	162	
<b>NORMAL OPERATING CONDITION .....</b>	<b>149</b>	<b>STEERING SWITCH .....</b>	<b>163</b>	G
Description .....	149	Exploded View .....	163	
<b>PRECAUTION .....</b>	<b>151</b>	Removal and Installation .....	163	
<b>PRECAUTIONS .....</b>	<b>151</b>	<b>AUXILIARY INPUT JACKS .....</b>	<b>164</b>	H
Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TEN- SIONER" .....	151	Exploded View .....	164	
Precaution for Battery Service .....	151	Removal and Installation .....	164	
Service Procedure Precautions for Models with a Pop-up Roll Bar .....	151	<b>CAMERA CONTROL UNIT .....</b>	<b>165</b>	I
Precaution for Trouble Diagnosis .....	151	Exploded View .....	165	
Precaution for Harness Repair .....	152	Removal and Installation .....	165	
<b>PREPARATION .....</b>	<b>153</b>	Adjustment .....	165	J
<b>PREPARATION .....</b>	<b>153</b>	<b>REAR VIEW CAMERA .....</b>	<b>166</b>	K
Commercial Service Tools .....	153	Exploded View .....	166	
<b>REMOVAL AND INSTALLATION .....</b>	<b>154</b>	Removal and Installation .....	166	
<b>AV CONTROL UNIT .....</b>	<b>154</b>	Adjustment .....	166	L
Exploded View .....	154	<b>STEERING ANGLE SENSOR .....</b>	<b>168</b>	
Removal and Installation .....	154	Exploded View .....	168	
<b>DISPLAY UNIT .....</b>	<b>155</b>	Removal and Installation .....	168	M
Exploded View .....	155	<b>ANTENNA FEEDER (RADIO) .....</b>	<b>169</b>	
Removal and Installation .....	155	Harness Layout .....	169	
<b>DOOR SPEAKER .....</b>	<b>156</b>	<b>ANTENNA FEEDER (SATELLITE RADIO) ....</b>	<b>170</b>	AV
Exploded View .....	156	Harness Layout .....	170	
Removal and Installation .....	156	<b>BOSE AUDIO WITHOUT NAVIGATION</b>		
<b>REAR SPEAKER .....</b>	<b>157</b>	<b>BASIC INSPECTION .....</b>	<b>171</b>	O
Exploded View .....	157	<b>DIAGNOSIS AND REPAIR WORK FLOW ....</b>	<b>171</b>	
Removal and Installation .....	157	Work Flow .....	171	
		<b>INSPECTION AND ADJUSTMENT .....</b>	<b>173</b>	P
		<b>ADDITIONAL SERVICE WHEN REMOVING BAT- TERY NEGATIVE TERMINAL .....</b>	<b>173</b>	
		ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description ..	173	

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Re- pair Requirement .....	173	DTC Logic .....	211
		Diagnosis Procedure .....	211
<b>ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT .....</b>	<b>173</b>	<b>U1310 AV CONTROL UNIT .....</b>	<b>212</b>
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description .....	173	Description .....	212
ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement ...	173	DTC Logic .....	212
<b>REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT .....</b>	<b>173</b>	<b>U1200 AV CONTROL UNIT .....</b>	<b>213</b>
REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Description .....	173	Description .....	213
REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Special Re- pair Requirement .....	173	DTC Logic .....	213
<b>SYSTEM DESCRIPTION .....</b>	<b>174</b>	<b>U1216 AV CONTROL UNIT .....</b>	<b>214</b>
<b>MULTI AV SYSTEM .....</b>	<b>174</b>	Description .....	214
System Diagram .....	174	DTC Logic .....	214
System Description .....	174	<b>U1231 BOSE AMP. ....</b>	<b>215</b>
Component Parts Location .....	176	Description .....	215
Component Description .....	177	DTC Logic .....	215
<b>AUDIO SYSTEM .....</b>	<b>179</b>	<b>U1243 DISPLAY UNIT .....</b>	<b>216</b>
System Diagram .....	179	Description .....	216
System Description .....	179	DTC Logic .....	216
Component Parts Location .....	181	Diagnosis Procedure .....	216
Component Description .....	182	<b>U1250 CAMERA CONTROL UNIT .....</b>	<b>218</b>
<b>REAR VIEW MONITOR SYSTEM .....</b>	<b>184</b>	Description .....	218
System Diagram .....	184	DTC Logic .....	218
System Description .....	184	Diagnosis Procedure .....	218
Component Parts Location .....	185	<b>U1255 SATELLITE RADIO TUNER .....</b>	<b>219</b>
Component Description .....	186	Description .....	219
<b>HANDS-FREE PHONE SYSTEM .....</b>	<b>187</b>	DTC Logic .....	219
System Diagram .....	187	Diagnosis Procedure .....	219
System Description .....	187	<b>U1260, U1261, U1262, U1263 CENTER SPEAKER .....</b>	<b>221</b>
Component Parts Location .....	188	Description .....	221
Component Description .....	189	DTC Logic .....	221
<b>DIAGNOSIS SYSTEM (AV CONTROL UNIT). 190</b>	<b>190</b>	Diagnosis Procedure .....	221
Diagnosis Description .....	190	<b>U1264, U1265, U1266, U1267 FRONT RIGHT TWEETER/RIGHT SQUAWKER .....</b>	<b>222</b>
CONSULT - III Function (MULTI AV) .....	203	Description .....	222
<b>DIAGNOSIS SYSTEM (TEL ADAPTER UNIT) 208</b>	<b>208</b>	DTC Logic .....	222
Diagnosis Description .....	208	Diagnosis Procedure .....	222
<b>DTC/CIRCUIT DIAGNOSIS .....</b>	<b>210</b>	<b>U1268, U1269, U126A, U126B FRONT RIGHT DOOR WOOFER .....</b>	<b>223</b>
<b>U1000 CAN COMM CIRCUIT .....</b>	<b>210</b>	Description .....	223
Description .....	210	DTC Logic .....	223
DTC Logic .....	210	Diagnosis Procedure .....	223
Diagnosis Procedure .....	210	<b>U126C, U126D, U126E, U126F REAR RIGHT WOOFER .....</b>	<b>224</b>
<b>U1010 CONTROL UNIT (CAN) .....</b>	<b>211</b>	Description .....	224
Description .....	211	DTC Logic .....	224
		Diagnosis Procedure .....	224
		<b>U1274, U1275, U1276, U1277 REAR LEFT WOOFER .....</b>	<b>225</b>
		Description .....	225

DTC Logic .....	225	CAMERA CONTROL UNIT : Diagnosis Procedure .....	238	A
Diagnosis Procedure .....	225			
<b>U1278, U1279, U127A, U127B FRONT LEFT DOOR WOOFER .....</b>	<b>226</b>	<b>SATELLITE RADIO TUNER .....</b>	<b>239</b>	B
Description .....	226	SATELLITE RADIO TUNER : Diagnosis Procedure .....	239	
DTC Logic .....	226			
Diagnosis Procedure .....	226	<b>BOSE AMP. ....</b>	<b>239</b>	C
		BOSE AMP. : Diagnosis Procedure .....	239	
<b>U127C, U127D, U127E, U127F FRONT LEFT TWEETER/LEFT SQUAWKER .....</b>	<b>227</b>	<b>IPOD ADAPTER .....</b>	<b>240</b>	D
Description .....	227	iPod ADAPTER : Diagnosis Procedure .....	240	
DTC Logic .....	227			
Diagnosis Procedure .....	227	<b>TEL ADAPTER UNIT .....</b>	<b>240</b>	E
		TEL ADAPTER UNIT : Diagnosis Procedure .....	240	
<b>U1280, U1281, U1282, U1283 DRIVER HEADREST LEFT SPEAKER .....</b>	<b>228</b>	<b>RGB (R: RED) SIGNAL CIRCUIT .....</b>	<b>242</b>	F
Description .....	228	Description .....	242	
DTC Logic .....	228	Diagnosis Procedure .....	242	
Diagnosis Procedure .....	228			
<b>U1284, U1285, U1286, U1287 DRIVER HEADREST RIGHT SPEAKER .....</b>	<b>229</b>	<b>RGB (G: GREEN) SIGNAL CIRCUIT .....</b>	<b>243</b>	G
Description .....	229	Description .....	243	
DTC Logic .....	229	Diagnosis Procedure .....	243	
Diagnosis Procedure .....	229			
<b>U1288, U1289, U128A, U128B PASSENGER HEADREST LEFT SPEAKER .....</b>	<b>230</b>	<b>RGB (B: BLUE) SIGNAL CIRCUIT .....</b>	<b>244</b>	H
Description .....	230	Description .....	244	
DTC Logic .....	230	Diagnosis Procedure .....	244	
Diagnosis Procedure .....	230			
<b>U128C, U128D, U128E, U128F PASSENGER HEADREST RIGHT SPEAKER .....</b>	<b>231</b>	<b>RGB SYNCHRONIZING SIGNAL CIRCUIT ...</b>	<b>245</b>	I
Description .....	231	Description .....	245	
DTC Logic .....	231	Diagnosis Procedure .....	245	
Diagnosis Procedure .....	231			
<b>U1290, U1291, U1292, U1293 AudioPilot™ MICROPHONE .....</b>	<b>232</b>	<b>RGB AREA (YS) SIGNAL CIRCUIT .....</b>	<b>246</b>	J
Description .....	232	Description .....	246	
DTC Logic .....	232	Diagnosis Procedure .....	246	
Diagnosis Procedure .....	232			
<b>U1300 AV COMM CIRCUIT .....</b>	<b>234</b>	<b>HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT .....</b>	<b>247</b>	K
Description .....	234	Description .....	247	
		Diagnosis Procedure .....	247	
<b>POWER SUPPLY AND GROUND CIRCUIT ...</b>	<b>236</b>	<b>VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT .....</b>	<b>248</b>	L
		Description .....	248	
<b>AV CONTROL UNIT .....</b>	<b>236</b>	Diagnosis Procedure .....	248	M
AV CONTROL UNIT : Diagnosis Procedure .....	236			
<b>DISPLAY UNIT .....</b>	<b>236</b>	<b>AUX IMAGE SIGNAL CIRCUIT .....</b>	<b>249</b>	AV
DISPLAY UNIT : Diagnosis Procedure .....	236	Description .....	249	
		Diagnosis Procedure .....	249	
<b>MULTIFUNCTION SWITCH .....</b>	<b>237</b>	<b>COMPOSITE IMAGE SIGNAL CIRCUIT .....</b>	<b>250</b>	O
MULTIFUNCTION SWITCH : Diagnosis Procedure .....	237	Description .....	250	
		Diagnosis Procedure .....	250	
<b>CAMERA CONTROL UNIT .....</b>	<b>238</b>	<b>CONTROL SIGNAL CIRCUIT .....</b>	<b>251</b>	P
		Description .....	251	
		Diagnosis Procedure .....	251	
		<b>DISK EJECT SIGNAL CIRCUIT .....</b>	<b>252</b>	
		Description .....	252	
		Diagnosis Procedure .....	252	
		<b>MICROPHONE SIGNAL CIRCUIT .....</b>	<b>253</b>	

Description .....	253	<b>BOSE AMP.</b> .....	<b>326</b>
Diagnosis Procedure .....	253	Reference Value .....	326
<b>CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)</b> .....	<b>255</b>	Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM - .....	329
Description .....	255	<b>iPod ADAPTER</b> .....	<b>351</b>
Diagnosis Procedure .....	255	Reference Value .....	351
<b>CAMERA IMAGE SIGNAL CIRCUIT (CAMERA CONTROL UNIT TO AV CONTROL UNIT)</b> .....	<b>257</b>	Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM - .....	353
Description .....	257	<b>SATELLITE RADIO TUNER</b> .....	<b>374</b>
Diagnosis Procedure .....	257	Reference Value .....	374
<b>COMMUNICATION SIGNAL CIRCUIT (CONT-SAT)</b> .....	<b>258</b>	Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM - .....	375
Description .....	258	<b>TEL ADAPTER UNIT</b> .....	<b>397</b>
Diagnosis Procedure .....	258	Reference Value .....	397
<b>REQUEST SIGNAL CIRCUIT (SAT→CONT)</b> .	<b>260</b>	Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM - .....	398
Description .....	260	<b>CAMERA CONTROL UNIT</b> .....	<b>420</b>
Diagnosis Procedure .....	260	Reference Value .....	420
<b>STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT</b> .....	<b>261</b>	Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM - .....	422
Description .....	261	<b>SYMPTOM DIAGNOSIS</b> .....	<b>444</b>
Diagnosis Procedure .....	261	<b>MULTI AV SYSTEM SYMPTOMS</b> .....	<b>444</b>
<b>STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT</b> .....	<b>263</b>	Symptom Table .....	444
Description .....	263	<b>NORMAL OPERATING CONDITION</b> .....	<b>449</b>
Diagnosis Procedure .....	263	Description .....	449
<b>STEERING SWITCH SIGNAL A CIRCUIT</b> .....	<b>265</b>	<b>PRECAUTION</b> .....	<b>451</b>
Description .....	265	<b>PRECAUTIONS</b> .....	<b>451</b>
Diagnosis Procedure .....	265	Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" .....	451
Component Inspection .....	265	Precaution for Battery Service .....	451
<b>STEERING SWITCH SIGNAL B CIRCUIT</b> .....	<b>267</b>	Service Procedure Precautions for Models with a Pop-up Roll Bar .....	451
Description .....	267	Precaution for Trouble Diagnosis .....	451
Diagnosis Procedure .....	267	Precaution for Harness Repair .....	452
Component Inspection .....	267	<b>PREPARATION</b> .....	<b>453</b>
<b>STEERING SWITCH SIGNAL GND CIRCUIT.</b>	<b>269</b>	<b>PREPARATION</b> .....	<b>453</b>
Description .....	269	Commercial Service Tools .....	453
Diagnosis Procedure .....	269	<b>REMOVAL AND INSTALLATION</b> .....	<b>454</b>
Component Inspection .....	269	<b>AV CONTROL UNIT</b> .....	<b>454</b>
<b>ECU DIAGNOSIS INFORMATION</b> .....	<b>271</b>	Exploded View .....	454
<b>AV CONTROL UNIT</b> .....	<b>271</b>	Removal and Installation .....	454
Reference Value .....	271	<b>DISPLAY UNIT</b> .....	<b>455</b>
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM - .....	278	Exploded View .....	455
DTC Index .....	299	Removal and Installation .....	455
<b>DISPLAY UNIT</b> .....	<b>302</b>	<b>DOOR SQUAWKER</b> .....	<b>456</b>
Reference Value .....	302	Exploded View .....	456
Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM - .....	304		

Removal and Installation .....	456	<b>MICROPHONE</b> .....	<b>472</b>	
<b>DOOR WOOFER</b> .....	<b>457</b>	Exploded View .....	472	A
Exploded View .....	457	Removal and Installation .....	472	
Removal and Installation .....	457	<b>CAMERA CONTROL UNIT</b> .....	<b>473</b>	B
<b>TWEETER</b> .....	<b>458</b>	Exploded View .....	473	
Exploded View .....	458	Removal and Installation .....	473	C
Removal and Installation .....	458	Adjustment .....	473	
<b>CENTER SPEAKER</b> .....	<b>459</b>	<b>REAR VIEW CAMERA</b> .....	<b>474</b>	D
Exploded View .....	459	Exploded View .....	474	
Removal and Installation .....	459	Removal and Installation .....	474	
<b>REAR WOOFER</b> .....	<b>460</b>	Adjustment .....	474	
Exploded View .....	460	<b>STEERING ANGLE SENSOR</b> .....	<b>476</b>	E
Removal and Installation .....	460	Exploded View .....	476	
<b>HEADREST SPEAKER</b> .....	<b>461</b>	Removal and Installation .....	476	
Exploded View .....	461	<b>TEL ADAPTER UNIT</b> .....	<b>477</b>	F
Removal and Installation .....	461	Exploded View .....	477	
<b>BOSE AMP.</b> .....	<b>462</b>	Removal and Installation .....	477	
Exploded View .....	462	<b>ANTENNA FEEDER (RADIO)</b> .....	<b>478</b>	G
Removal and Installation .....	462	Harness Layout .....	478	
<b>AudioPilot® MICROPHONE</b> .....	<b>463</b>	<b>ANTENNA FEEDER (SATELLITE RADIO)</b> ....	<b>479</b>	H
Exploded View .....	463	Harness Layout .....	479	
Removal and Installation .....	463	<b>ANTENNA FEEDER (TEL)</b> .....	<b>480</b>	I
<b>ANTENNA BASE</b> .....	<b>464</b>	Harness Layout .....	480	
Exploded View .....	464	<b>BOSE AUDIO WITH NAVIGATION</b>		
Removal and Installation .....	464	<b>BASIC INSPECTION</b> .....	<b>481</b>	J
<b>SATELLITE RADIO TUNER</b> .....	<b>465</b>	<b>DIAGNOSIS AND REPAIR WORK FLOW</b> ....	<b>481</b>	K
Exploded View .....	465	Work Flow .....	481	
Removal and Installation .....	465	<b>INSPECTION AND ADJUSTMENT</b> .....	<b>483</b>	L
<b>MULTIFUNCTION SWITCH</b> .....	<b>466</b>	<b>ADDITIONAL SERVICE WHEN REMOVING BAT-</b>		
Exploded View .....	466	<b>TERY NEGATIVE TERMINAL</b> .....	<b>483</b>	
Removal and Installation .....	466	ADDITIONAL SERVICE WHEN REMOVING		
<b>PRESET SWITCH</b> .....	<b>467</b>	BATTERY NEGATIVE TERMINAL : Description ..	483	M
Exploded View .....	467	ADDITIONAL SERVICE WHEN REMOVING		
Removal and Installation .....	467	BATTERY NEGATIVE TERMINAL : Special Re-		
<b>STEERING SWITCH</b> .....	<b>468</b>	pair Requirement .....	483	
Exploded View .....	468	<b>ADDITIONAL SERVICE WHEN REPLACING</b>		
Removal and Installation .....	468	<b>CONTROL UNIT</b> .....	<b>483</b>	AV
<b>iPod ADAPTER</b> .....	<b>469</b>	ADDITIONAL SERVICE WHEN REPLACING		
Exploded View .....	469	CONTROL UNIT : Description .....	483	O
Removal and Installation .....	469	ADDITIONAL SERVICE WHEN REPLACING		
<b>iPod CONNECTOR</b> .....	<b>470</b>	CONTROL UNIT : Special Repair Requirement ...	483	
Exploded View .....	470	<b>REAR VIEW MONITOR POSSIBLE ROUTE LINE</b>		
Removal and Installation .....	470	<b>CENTER POSITION ADJUSTMENT</b> .....	<b>483</b>	P
<b>AUXILIARY INPUT JACKS</b> .....	<b>471</b>	REAR VIEW MONITOR POSSIBLE ROUTE LINE		
Exploded View .....	471	CENTER POSITION ADJUSTMENT : Description		
Removal and Installation .....	471	..483		
		REAR VIEW MONITOR POSSIBLE ROUTE LINE		
		CENTER POSITION ADJUSTMENT : Special Re-		
		pair Requirement .....	483	

<b>SYSTEM DESCRIPTION</b> .....	<b>484</b>	<b>U1218 AV CONTROL UNIT</b> .....	<b>532</b>
		Description .....	532
		DTC Logic .....	532
<b>MULTI AV SYSTEM</b> .....	<b>484</b>	<b>U1219 AV CONTROL UNIT</b> .....	<b>533</b>
System Diagram .....	484	Description .....	533
System Description .....	484	DTC Logic .....	533
Component Parts Location .....	486		
Component Description .....	487	<b>U1220 AV CONTROL UNIT</b> .....	<b>534</b>
		Description .....	534
		DTC Logic .....	534
<b>NAVIGATION SYSTEM</b> .....	<b>489</b>	<b>U121A AV CONTROL UNIT</b> .....	<b>535</b>
System Diagram .....	489	Description .....	535
System Description .....	489	DTC Logic .....	535
Component Parts Location .....	492		
Component Description .....	493	<b>U121B AV CONTROL UNIT</b> .....	<b>536</b>
		Description .....	536
		DTC Logic .....	536
<b>AUDIO SYSTEM</b> .....	<b>494</b>	<b>U121C AV CONTROL UNIT</b> .....	<b>537</b>
System Diagram .....	494	Description .....	537
System Description .....	494	DTC Logic .....	537
Component Parts Location .....	496		
Component Description .....	497	<b>U121D AV CONTROL UNIT</b> .....	<b>538</b>
		Description .....	538
		DTC Logic .....	538
<b>REAR VIEW MONITOR SYSTEM</b> .....	<b>499</b>	<b>U121E AV CONTROL UNIT</b> .....	<b>539</b>
System Diagram .....	499	Description .....	539
System Description .....	499	DTC Logic .....	539
Component Parts Location .....	500		
Component Description .....	501	<b>U121F AV CONTROL UNIT</b> .....	<b>540</b>
		Description .....	540
		DTC Logic .....	540
		Diagnosis Procedure .....	540
<b>DIAGNOSIS SYSTEM (AV CONTROL UNIT)</b> .....	<b>502</b>	<b>U1204 GPS</b> .....	<b>541</b>
Diagnosis Description .....	502	Description .....	541
CONSULT - III Function (MULTI AV) .....	519	DTC Logic .....	541
		Diagnosis Procedure .....	541
<b>DTC/CIRCUIT DIAGNOSIS</b> .....	<b>525</b>	<b>U1205 GPS</b> .....	<b>542</b>
		Description .....	542
		DTC Logic .....	542
		Diagnosis Procedure .....	542
<b>U1000 CAN COMM CIRCUIT</b> .....	<b>525</b>	<b>U1206 GPS</b> .....	<b>543</b>
Description .....	525	Description .....	543
DTC Logic .....	525	DTC Logic .....	543
Diagnosis Procedure .....	525	Diagnosis Procedure .....	543
<b>U1010 CONTROL UNIT (CAN)</b> .....	<b>526</b>	<b>U1207 GPS</b> .....	<b>544</b>
Description .....	526	Description .....	544
DTC Logic .....	526	DTC Logic .....	544
Diagnosis Procedure .....	526	Diagnosis Procedure .....	544
<b>U1310 AV CONTROL UNIT</b> .....	<b>527</b>	<b>U1231 BOSE AMP.</b> .....	<b>545</b>
Description .....	527	Description .....	545
DTC Logic .....	527	DTC Logic .....	545
<b>U1200 AV CONTROL UNIT</b> .....	<b>528</b>	<b>U1243 DISPLAY UNIT</b> .....	<b>546</b>
Description .....	528		
DTC Logic .....	528		
<b>U1201 AV CONTROL UNIT</b> .....	<b>529</b>		
Description .....	529		
DTC Logic .....	529		
<b>U1216 AV CONTROL UNIT</b> .....	<b>530</b>		
Description .....	530		
DTC Logic .....	530		
<b>U1217 AV CONTROL UNIT</b> .....	<b>531</b>		
Description .....	531		
DTC Logic .....	531		



Description .....	546	<b>U1280, U1281, U1282, U1283 DRIVER HEAD-REST LEFT SPEAKER .....</b>	<b>558</b>	A
DTC Logic .....	546	Description .....	558	
Diagnosis Procedure .....	546	DTC Logic .....	558	
<b>U1244 GPS ANTENNA .....</b>	<b>548</b>	Diagnosis Procedure .....	558	B
Description .....	548	<b>U1284, U1285, U1286, U1287 DRIVER HEAD-REST RIGHT SPEAKER .....</b>	<b>559</b>	C
DTC Logic .....	548	Description .....	559	
Diagnosis Procedure .....	548	DTC Logic .....	559	
<b>U1250 CAMERA CONTROL UNIT .....</b>	<b>549</b>	Diagnosis Procedure .....	559	D
Description .....	549	<b>U1288, U1289, U128A, U128B PASSENGER HEADREST LEFT SPEAKER .....</b>	<b>560</b>	E
DTC Logic .....	549	Description .....	560	
Diagnosis Procedure .....	549	DTC Logic .....	560	
<b>U1258 SATELLITE RADIO ANTENNA .....</b>	<b>550</b>	Diagnosis Procedure .....	560	F
Description .....	550	<b>U128C, U128D, U128E, U128F PASSENGER HEADREST RIGHT SPEAKER .....</b>	<b>561</b>	G
DTC Logic .....	550	Description .....	561	
Diagnosis Procedure .....	550	DTC Logic .....	561	
<b>U1260, U1261, U1262, U1263 CENTER SPEAKER .....</b>	<b>551</b>	Diagnosis Procedure .....	561	H
Description .....	551	<b>U1290, U1291, U1292, U1293 AudioPilot™ MICROPHONE .....</b>	<b>562</b>	I
DTC Logic .....	551	Description .....	562	
Diagnosis Procedure .....	551	DTC Logic .....	562	
<b>U1264, U1265, U1266, U1267 FRONT RIGHT TWEETER/RIGHT SQUAWKER .....</b>	<b>552</b>	Diagnosis Procedure .....	562	J
Description .....	552	<b>U1300 AV COMM CIRCUIT .....</b>	<b>564</b>	
DTC Logic .....	552	Description .....	564	K
Diagnosis Procedure .....	552	<b>POWER SUPPLY AND GROUND CIRCUIT ..</b>	<b>565</b>	
<b>U1268, U1269, U126A, U126B FRONT RIGHT DOOR WOOFER .....</b>	<b>553</b>	<b>AV CONTROL UNIT .....</b>	<b>565</b>	
Description .....	553	AV CONTROL UNIT : Diagnosis Procedure .....	565	L
DTC Logic .....	553	<b>DISPLAY UNIT .....</b>	<b>565</b>	
Diagnosis Procedure .....	553	DISPLAY UNIT : Diagnosis Procedure .....	565	M
<b>U126C, U126D, U126E, U126F REAR RIGHT WOOFER .....</b>	<b>554</b>	<b>MULTIFUNCTION SWITCH .....</b>	<b>566</b>	
Description .....	554	MULTIFUNCTION SWITCH : Diagnosis Procedure .....	566	
DTC Logic .....	554	<b>CAMERA CONTROL UNIT .....</b>	<b>567</b>	
Diagnosis Procedure .....	554	CAMERA CONTROL UNIT : Diagnosis Procedure .....	567	AV
<b>U1274, U1275, U1276, U1277 REAR LEFT WOOFER .....</b>	<b>555</b>	<b>BOSE AMP. ....</b>	<b>567</b>	
Description .....	555	BOSE AMP. : Diagnosis Procedure .....	567	O
DTC Logic .....	555	<b>IPOD ADAPTER .....</b>	<b>568</b>	
Diagnosis Procedure .....	555	iPod ADAPTER : Diagnosis Procedure .....	568	P
<b>U1278, U1279, U127A, U127B FRONT LEFT DOOR WOOFER .....</b>	<b>556</b>	<b>RGB (R: RED) SIGNAL CIRCUIT .....</b>	<b>569</b>	
Description .....	556	Description .....	569	
DTC Logic .....	556	Diagnosis Procedure .....	569	
Diagnosis Procedure .....	556	<b>RGB (G: GREEN) SIGNAL CIRCUIT .....</b>	<b>570</b>	
<b>U127C, U127D, U127E, U127F FRONT LEFT TWEETER/LEFT SQUAWKER .....</b>	<b>557</b>	Description .....	570	
Description .....	557	Diagnosis Procedure .....	570	
DTC Logic .....	557			
Diagnosis Procedure .....	557			

<b>RGB (B: BLUE) SIGNAL CIRCUIT</b> .....	<b>571</b>	Description .....	589
Description .....	571	Diagnosis Procedure .....	589
Diagnosis Procedure .....	571	Component Inspection .....	589
<b>RGB SYNCHRONIZING SIGNAL CIRCUIT</b> ...	<b>572</b>	<b>STEERING SWITCH SIGNAL GND CIRCUIT..</b>	<b>591</b>
Description .....	572	Description .....	591
Diagnosis Procedure .....	572	Diagnosis Procedure .....	591
<b>RGB AREA (YS) SIGNAL CIRCUIT</b> .....	<b>573</b>	Component Inspection .....	591
Description .....	573	<b>ECU DIAGNOSIS INFORMATION</b> .....	<b>593</b>
Diagnosis Procedure .....	573	<b>AV CONTROL UNIT</b> .....	<b>593</b>
<b>HORIZONTAL SYNCHRONIZING (HP) SIG-</b>		Reference Value .....	593
<b>NAL CIRCUIT</b> .....	<b>574</b>	Wiring Diagram - BOSE AUDIO WITH NAVIGA-	
Description .....	574	TION SYSTEM - .....	598
Diagnosis Procedure .....	574	Fail-Safe .....	620
<b>VERTICAL SYNCHRONIZING (VP) SIGNAL</b>		DTC Index .....	622
<b>CIRCUIT</b> .....	<b>575</b>	<b>DISPLAY UNIT</b> .....	<b>625</b>
Description .....	575	Reference Value .....	625
Diagnosis Procedure .....	575	Wiring Diagram - BOSE AUDIO WITH NAVIGA-	
<b>AUX IMAGE SIGNAL CIRCUIT</b> .....	<b>576</b>	TION SYSTEM - .....	627
Description .....	576	<b>BOSE AMP.</b> .....	<b>650</b>
Diagnosis Procedure .....	576	Reference Value .....	650
<b>DISK EJECT SIGNAL CIRCUIT</b> .....	<b>577</b>	Wiring Diagram - BOSE AUDIO WITH NAVIGA-	
Description .....	577	TION SYSTEM - .....	653
Diagnosis Procedure .....	577	<b>iPod ADAPTER</b> .....	<b>676</b>
<b>MICROPHONE SIGNAL CIRCUIT</b> .....	<b>578</b>	Reference Value .....	676
Description .....	578	Wiring Diagram - BOSE AUDIO WITH NAVIGA-	
Diagnosis Procedure .....	578	TION SYSTEM - .....	678
<b>CAMERA IMAGE SIGNAL CIRCUIT (REAR</b>		<b>CAMERA CONTROL UNIT</b> .....	<b>700</b>
<b>VIEW CAMERA TO CAMERA CONTROL</b>		Reference Value .....	700
<b>UNIT)</b> .....	<b>580</b>	Wiring Diagram - BOSE AUDIO WITH NAVIGA-	
Description .....	580	TION SYSTEM - .....	702
Diagnosis Procedure .....	580	<b>SYMPTOM DIAGNOSIS</b> .....	<b>725</b>
<b>CAMERA IMAGE SIGNAL CIRCUIT (CAM-</b>		<b>MULTI AV SYSTEM SYMPTOMS</b> .....	<b>725</b>
<b>ERA CONTROL UNIT TO DISPLAY UNIT)</b> ...	<b>582</b>	Symptom Table .....	725
Description .....	582	<b>NORMAL OPERATING CONDITION</b> .....	<b>730</b>
Diagnosis Procedure .....	582	Description .....	730
<b>STEERING ANGLE SENSOR SIGNAL 1, 2</b>		<b>PRECAUTION</b> .....	<b>735</b>
<b>CIRCUIT</b> .....	<b>583</b>	<b>PRECAUTIONS</b> .....	<b>735</b>
Description .....	583	Precaution for Supplemental Restraint System	
Diagnosis Procedure .....	583	(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	
<b>STEERING ANGLE SENSOR SIGNAL 3 CIR-</b>		SIONER" .....	735
<b>CUIT</b> .....	<b>585</b>	Precaution for Battery Service .....	735
Description .....	585	Service Procedure Precautions for Models with a	
Diagnosis Procedure .....	585	Pop-up Roll Bar .....	735
<b>STEERING SWITCH SIGNAL A CIRCUIT</b> .....	<b>587</b>	Precaution for Trouble Diagnosis .....	735
Description .....	587	Precaution for Harness Repair .....	736
Diagnosis Procedure .....	587	<b>PREPARATION</b> .....	<b>737</b>
Component Inspection .....	587	<b>PREPARATION</b> .....	<b>737</b>
<b>STEERING SWITCH SIGNAL B CIRCUIT</b> .....	<b>589</b>	Commercial Service Tools .....	737

<b>REMOVAL AND INSTALLATION</b> .....	<b>738</b>	Exploded View .....	750	
		Removal and Installation .....	750	A
<b>AV CONTROL UNIT</b> .....	<b>738</b>	<b>STEERING SWITCH</b> .....	<b>751</b>	
Exploded View .....	738	Exploded View .....	751	B
Removal and Installation .....	738	Removal and Installation .....	751	
<b>DISPLAY UNIT</b> .....	<b>739</b>	<b>iPod ADAPTER</b> .....	<b>752</b>	C
Exploded View .....	739	Exploded View .....	752	
Removal and Installation .....	739	Removal and Installation .....	752	
<b>DOOR SQUAWKER</b> .....	<b>740</b>	<b>iPod CONNECTOR</b> .....	<b>753</b>	D
Exploded View .....	740	Exploded View .....	753	
Removal and Installation .....	740	Removal and Installation .....	753	
<b>DOOR WOOFER</b> .....	<b>741</b>	<b>AUXILIARY INPUT JACKS</b> .....	<b>754</b>	E
Exploded View .....	741	Exploded View .....	754	
Removal and Installation .....	741	Removal and Installation .....	754	
<b>TWEETER</b> .....	<b>742</b>	<b>MICROPHONE</b> .....	<b>755</b>	F
Exploded View .....	742	Exploded View .....	755	
Removal and Installation .....	742	Removal and Installation .....	755	
<b>CENTER SPEAKER</b> .....	<b>743</b>	<b>GPS ANTENNA</b> .....	<b>756</b>	G
Exploded View .....	743	Exploded View .....	756	
Removal and Installation .....	743	Harness Layout .....	756	
<b>REAR WOOFER</b> .....	<b>744</b>	Removal and Installation .....	757	H
Exploded View .....	744	<b>CAMERA CONTROL UNIT</b> .....	<b>758</b>	
Removal and Installation .....	744	Exploded View .....	758	I
<b>HEADREST SPEAKER</b> .....	<b>745</b>	Removal and Installation .....	758	
Exploded View .....	745	Adjustment .....	758	
Removal and Installation .....	745	<b>REAR VIEW CAMERA</b> .....	<b>759</b>	J
<b>BOSE AMP.</b> .....	<b>746</b>	Exploded View .....	759	
Exploded View .....	746	Removal and Installation .....	759	
Removal and Installation .....	746	Adjustment .....	759	K
<b>AudioPilot® MICROPHONE</b> .....	<b>747</b>	<b>STEERING ANGLE SENSOR</b> .....	<b>761</b>	
Exploded View .....	747	Exploded View .....	761	L
Removal and Installation .....	747	Removal and Installation .....	761	
<b>ANTENNA BASE</b> .....	<b>748</b>	<b>ANTENNA FEEDER (RADIO)</b> .....	<b>762</b>	M
Exploded View .....	748	Harness Layout .....	762	
Removal and Installation .....	748	<b>ANTENNA FEEDER (SATELLITE RADIO)</b> ....	<b>763</b>	
<b>MULTIFUNCTION SWITCH</b> .....	<b>749</b>	Harness Layout .....	763	AV
Exploded View .....	749	<b>ANTENNA FEEDER (GPS)</b> .....	<b>764</b>	
Removal and Installation .....	749	Harness Layout .....	764	O
<b>PRESET SWITCH</b> .....	<b>750</b>			P

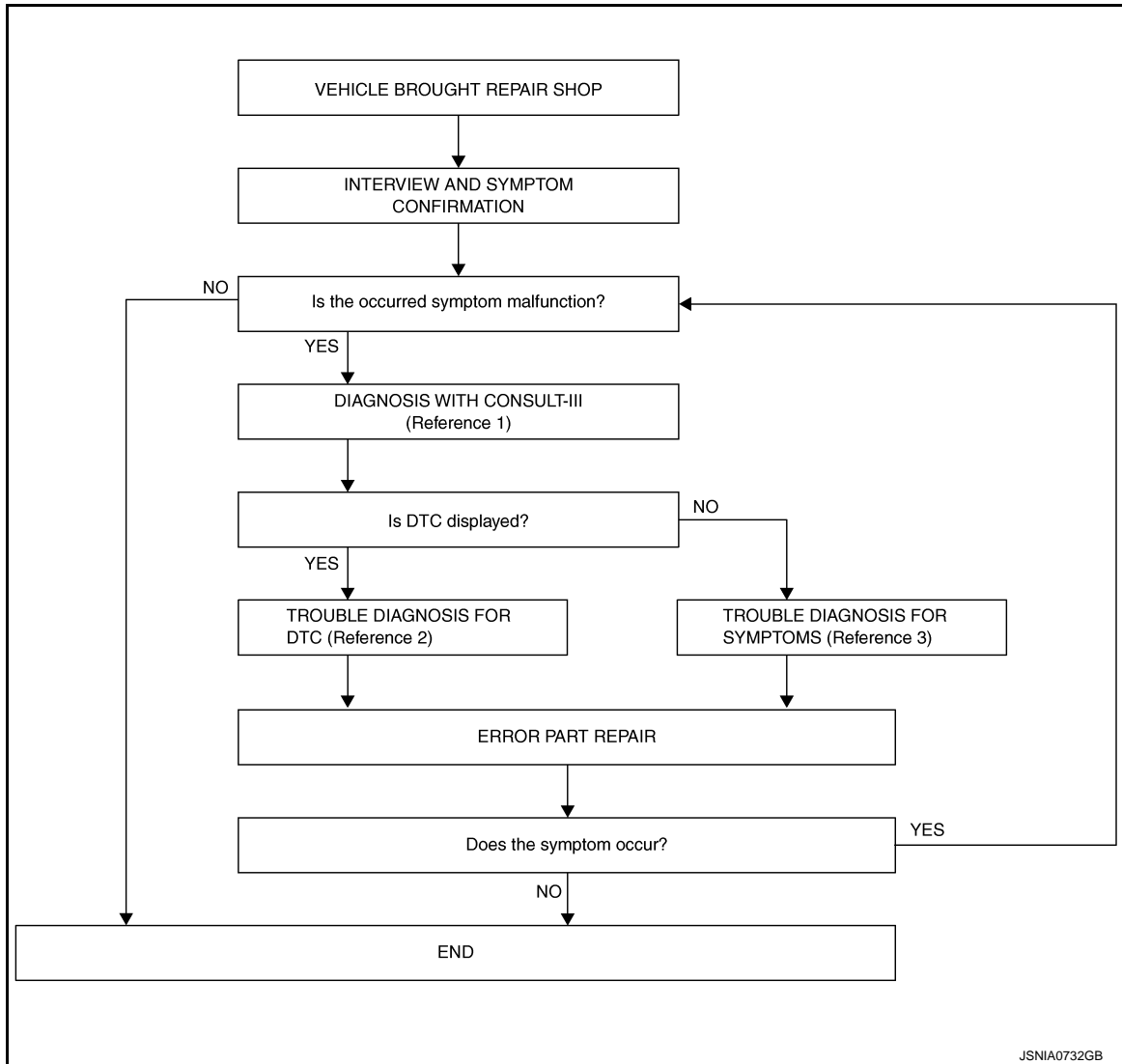
## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORK FLOW

#### Work Flow

INFOID:000000004929596

#### OVERALL SEQUENCE



- Reference 1... Refer to [AV-34, "CONSULT - III Function \(MULTI AV\)"](#).
- Reference 2... Refer to [AV-97, "DTC Index"](#).
- Reference 3... Refer to [AV-146, "Symptom Table"](#).

#### DETAILED FLOW

##### 1. INTERVIEW AND SYMPTOM CONFIRMATION

Check the malfunction symptoms by performing the following items.

- Interview the customer to obtain the malfunction information (conditions and environment when the malfunction occurred).
- Check the symptom.

##### Is the occurred symptom malfunction?

YES >> GO TO 2.

NO >> INSPECTION END

##### 2. DIAGNOSIS WITH CONSULT-III

# DIAGNOSIS AND REPAIR WORK FLOW

[BASE AUDIO WITHOUT NAVIGATION]

< BASIC INSPECTION >

1. Connect CONSULT-III and perform a self-diagnosis for "MULTI AV". Refer to [AV-34, "CONSULT - III Function \(MULTI AV\)"](#).

**NOTE:**

Skip to step 4 of the diagnosis procedure if "MULTI AV" is not displayed.

2. Check if any DTC is displayed in the self-diagnosis results.

Is DTC displayed?

YES >> GO TO 3.

NO >> GO TO 4.

## 3. TROUBLE DIAGNOSIS FOR DTC

1. Check the DTC indicated in the self-diagnosis results.
2. Perform the relevant diagnosis referring to the DTC Index. Refer to [AV-97, "DTC Index"](#).

>> GO TO 5.

## 4. TROUBLE DIAGNOSIS FOR SYMPTOMS

Perform the relevant diagnosis referring to the diagnosis chart by symptom. Refer to [AV-146, "Symptom Table"](#).

>> GO TO 5.

## 5. ERROR PART REPAIR

1. Repair or replace the identified malfunctioning parts.
2. Perform a self-diagnosis for "MULTI AV" with CONSULT-III.

**NOTE:**

Erase the stored self-diagnosis results after repairing or replacing the relevant components if any DTC has been indicated in the self-diagnosis results.

3. Check that the symptom does not occur.

Does the symptom occur?

YES >> GO TO 1.

NO >> INSPECTION END

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

AV

# INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[BASE AUDIO WITHOUT NAVIGATION]

## INSPECTION AND ADJUSTMENT

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

#### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:000000004929597

Always correct the center position of the rear view monitor's possible route line after disconnecting the battery negative terminal.

#### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:000000004929598

#### 1. CORRECTION OF CENTER POSITION OF REAR VIEW MONITOR'S POSSIBLE ROUTE LINE

Refer to the following for details.

>> Refer to [AV-14, "REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement"](#).

### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

#### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000004929599

When camera control unit is replaced, the center position of rear view monitor possible route line is corrected.

#### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:000000004929600

#### 1. CORRECTION OF CENTER POSITION OF REAR VIEW MONITOR'S POSSIBLE ROUTE LINE

Refer to the following for details.

>> Refer to [AV-14, "REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement"](#).

### REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT

#### REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Description

INFOID:000000004929601

Adjust the center position of the possible route line of the rear view monitor if it is shifted.

#### REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement

INFOID:000000004929602

#### 1. STEERING OPERATION

Steer the steering wheel to the leftmost and rightmost ends.

>> GO TO 2

#### 2. DRIVING

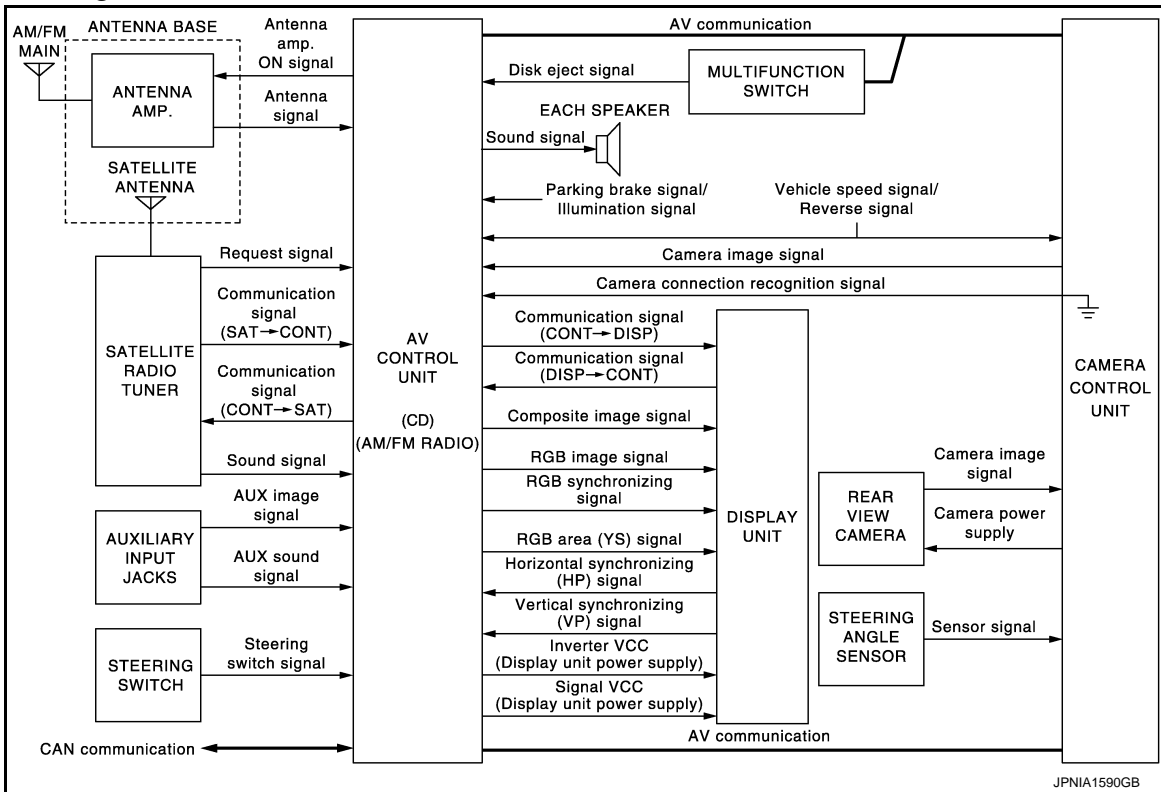
Drive the vehicle straight ahead 100 m (328.1 ft) or more at a speed of 30 km/h (18.6 MPH) or more.

>> END

SYSTEM DESCRIPTION

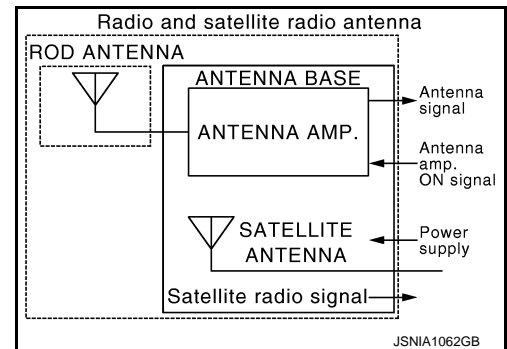
MULTI AV SYSTEM

System Diagram



NOTE:

- The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.
- An antenna base integrated with radio antenna and satellite radio antenna is adopted.



System Description

Multi AV system means that the following systems are integrated.

System name	System explanation
AUDIO SYSTEM	<a href="#">AV-19. "System Description"</a>
REAR VIEW MONITOR SYSTEM	<a href="#">AV-22. "System Description"</a>
VEHICLE INFORMATION SYSTEM	<ul style="list-style-type: none"> <li>• Indicates the status of audio, climate control system, fuel economy and maintenance.</li> <li>• AV control unit displays the fuel consumption status while receiving data signal through CAN communication from ECM and unified meter and A/C amp.</li> </ul>

# MULTI AV SYSTEM

[BASE AUDIO WITHOUT NAVIGATION]

## < SYSTEM DESCRIPTION >

System name	System explanation
SATELLITE RADIO SYSTEM	<a href="#">AV-19, "System Description"</a>
AUXILIARY INPUT SYSTEM	Refer to "AUXILIARY INPUT SYSTEM" shown below.

- AV control unit functions by transmitting/receiving data one by one with each unit (slave unit) that configures them completely as a master unit by connecting between units that configure MULTI AV system with two AV communication lines (H, L).
- Two AV communication lines (H, L) adopt a twisted pair line that is resistant to noise.
- AV control unit is connected by CAN communication, and it receives data signal from ECM, unified meter and A/C amp. It computes and displays fuel economy information value with the obtained information. Transmitting/receiving of data signal is performed by BCM. Also, it transmits the required signal of vehicle setting and receives the response signal.
- AV control unit is connected with display and serial communication, and it transmits the required signal of display and display control and receives the response signal from display. Also, it is connected with satellite radio by serial communication, and it transmits the operating signal and receives the display signal.

### NOTE:

AV control unit can perform CONSULT-III self-operating function and on board self-diagnosis.

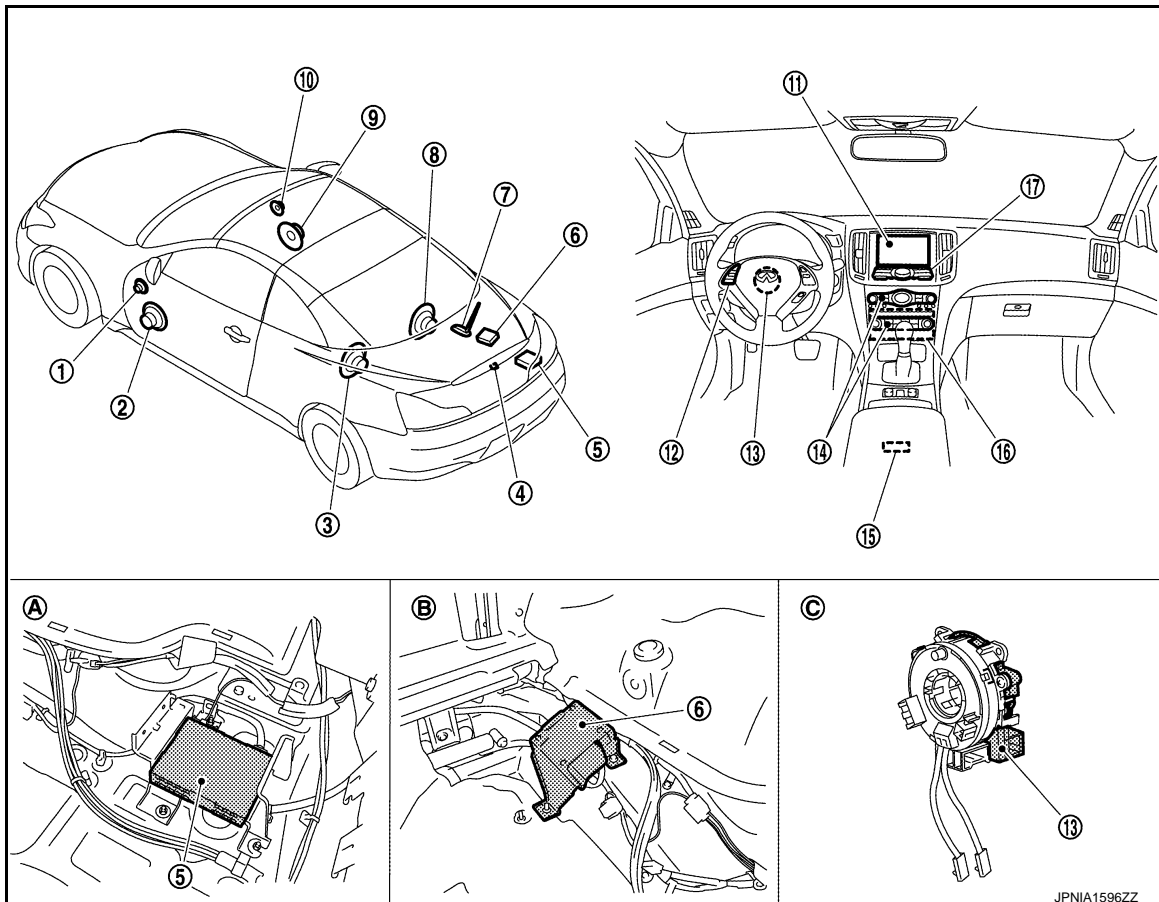
- CONSULT-III self-diagnosis: refer to [AV-34, "CONSULT - III Function \(MULTI AV\)"](#).
- On board self-diagnosis: refer to [AV-25, "Diagnosis Description"](#).

### AUXILIARY INPUT SYSTEM

- Image and sound can be output from an external device by connecting a device with auxiliary input jacks.
- Operation can be performed with multifunction switch and steering switch. Multifunction switch transmits operation signal to AV control unit by AV communication.

### Component Parts Location

INFOID:000000004371471



1. Tweeter LH
2. Door speaker LH
3. Rear speaker LH
4. Rear view camera
5. Satellite radio tuner
6. Camera control unit

7. Door speaker RH
8. Tweeter RH
9. Rear speaker RH
10. Front view camera
11. AV control unit
12. Multifunction switch
13. Camera control unit
14. Steering switch
15. AV communication line
16. AV communication line
17. AV control unit

JPNIA1596ZZ



# MULTI AV SYSTEM

[BASE AUDIO WITHOUT NAVIGATION]

## < SYSTEM DESCRIPTION >

- |  |                          |                           |
|--|--------------------------|---------------------------|
| 7. Antenna base (antenna amp. and satellite antenna) | 8. Rear speaker RH       | 9. Door speaker RH        |
| 10. Tweeter RH                                       | 11. Display unit         | 12. Steering switch       |
| 13. Steering angle sensor                            | 14. Preset switch        | 15. Auxiliary input jacks |
| 16. AV control unit                                  | 17. Multifunction switch |                           |
| A. Trunk room RH                                     | B. Trunk room RH         | C. Spiral cable part      |

## Component Description

INFOID:000000004371472

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>AV control unit includes audio function and vehicle information function.</li> <li>It is connected to ECM and unified meter and A/C amp via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Auxiliary image signal is input from the auxiliary input jacks.</li> </ul>
DISPLAY UNIT	<ul style="list-style-type: none"> <li>Display image is controlled by the serial communication from AV control unit.</li> <li>RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing).</li> <li>Synchronizing signal (HP, VP) is output to AV control unit.</li> <li>Composite image signal (auxiliary and camera images) is input from the AV control unit.</li> </ul>
DOOR SPEAKER	<ul style="list-style-type: none"> <li>Outputs sound signal from AV control unit.</li> <li>Outputs high, mid and low range sounds.</li> </ul>
REAR SPEAKER	<ul style="list-style-type: none"> <li>Outputs sound signal from AV control unit.</li> <li>Outputs high, mid and low range sounds.</li> </ul>
TWEETER	<ul style="list-style-type: none"> <li>Outputs sound signal from AV control unit.</li> <li>Outputs high range sound.</li> </ul>
MULTIFUNCTION SWITCH	<ul style="list-style-type: none"> <li>Operation panel is equipped with the centralized switch where audio and auxiliary input operations are integrated.</li> <li>Connected with preset switch via cable, and operation signal is transmitted to AV control unit via AV communication.</li> </ul>
PRESET SWITCH	<ul style="list-style-type: none"> <li>Operation panel is equipped with the centralized switch where audio and air conditioner operations are integrated.</li> <li>Connected with multifunction switch via cable, and operation signal is transmitted to AV control unit via AV communication.</li> <li>The CD ejection operating signal is performed by hardwire.</li> </ul>
CAMERA CONTROL UNIT	<ul style="list-style-type: none"> <li>Camera image signal is input from rear view camera, and camera image is indicated on the display via AV control unit.</li> <li>Power (camera ON signal) is transmitted to rear view camera.</li> <li>Controlled by AV communication transmitted from AV control unit.</li> <li>AV control unit recognizes the presence of camera system with camera connection recognition signal.</li> </ul>
REAR VIEW CAMERA	The image of vehicle rear view is transmitted to camera control unit.
STEERING ANGLE SENSOR	Sensor signal (steering angle) is transmitted to camera control unit.
STEERING SWITCH	<ul style="list-style-type: none"> <li>The operation of audio, etc. can be performed.</li> <li>Steering switch signal (operation signal) is output to AV control unit.</li> </ul>
AUXILIARY INPUT JACKS	The image signal of the auxiliary input is output via the AV control unit to the display unit, and it outputs the sound signal to the AV control unit.

## MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Part name	Description
ANTENNA BASE	<p>An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.</p> <p>ANTENNA AMP.</p> <ul style="list-style-type: none"><li>• Radio signal received by rod antenna is amplified and transmitted to AV control unit.</li><li>• Power (antenna amp. ON signal) is supplied from AV control unit.</li></ul> <p>SATELLITE RADIO ANTENNA</p> <ul style="list-style-type: none"><li>• Receives the satellite radio waves and outputs it to satellite radio tuner.</li></ul>
SATELLITE RADIO TUNER	<ul style="list-style-type: none"><li>• Inputs the satellite radio signal from satellite radio antenna and outputs the sound signal to the AV control unit.</li><li>• It is controlled with the AV control unit and serial communication (communication signal and request signal).</li></ul>

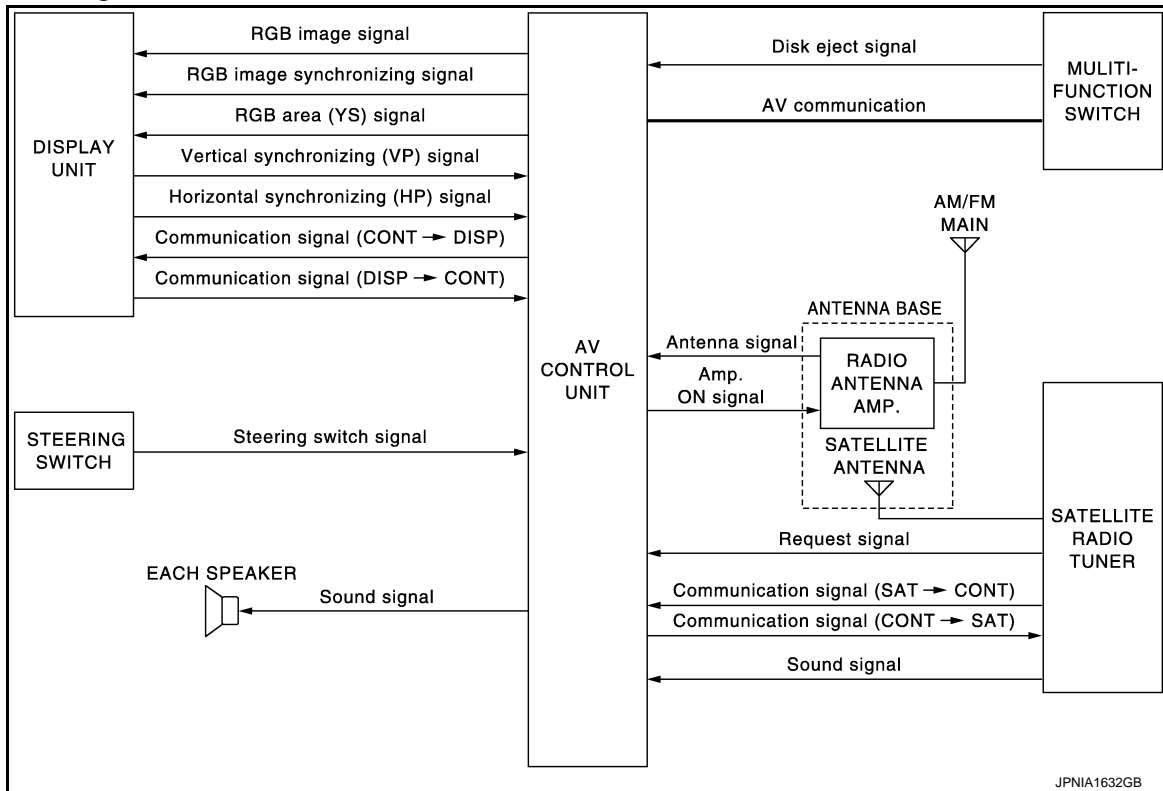
# AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

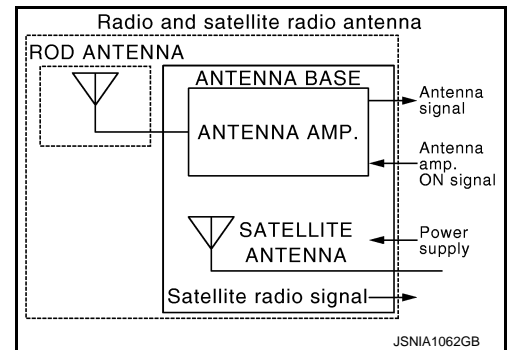
## AUDIO SYSTEM

### System Diagram



**NOTE:**

- The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.
- An antenna base integrated with radio antenna and satellite radio antenna is adopted.



### System Description

The audio system is equipped with the following functions. Each function can be operated with the multifunction switch, preset switch or steering switch. It indicates the operation status of AUDIO to the display unit.

Function
AM/FM radio
CD
Satellite radio

### FUNCTION DESCRIPTION

**Operating Signal**

Operation of the audio system can be performed with the multifunction switch, preset switch or steering switch.

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AV

# AUDIO SYSTEM

## < SYSTEM DESCRIPTION >

## [BASE AUDIO WITHOUT NAVIGATION]

- Operating signal is transmitted to AV control unit with AV communication when it is operated by multifunction switch or preset switch. The CD ejection operating signal is performed by hardwire.
- Operating signal is transmitted to AV control unit with steering switch signal when it is operated by steering switch.

### Screen Display

- The display switching of the screen is performed with the communication signal between the display and the AV control unit.
- The image signal to display operating condition is performed with RGB signal, RGB area signal and RGB image synchronizing signal.

### AM/FM Radio Mode

- AM/FM radio tuner is built into AV control unit.
- Audio signal is received by rod antenna, next it is amplified by antenna amp, and finally it is input to AV control unit. AV control unit outputs the audio signal to each speaker.

### CD Mode (6CDs)

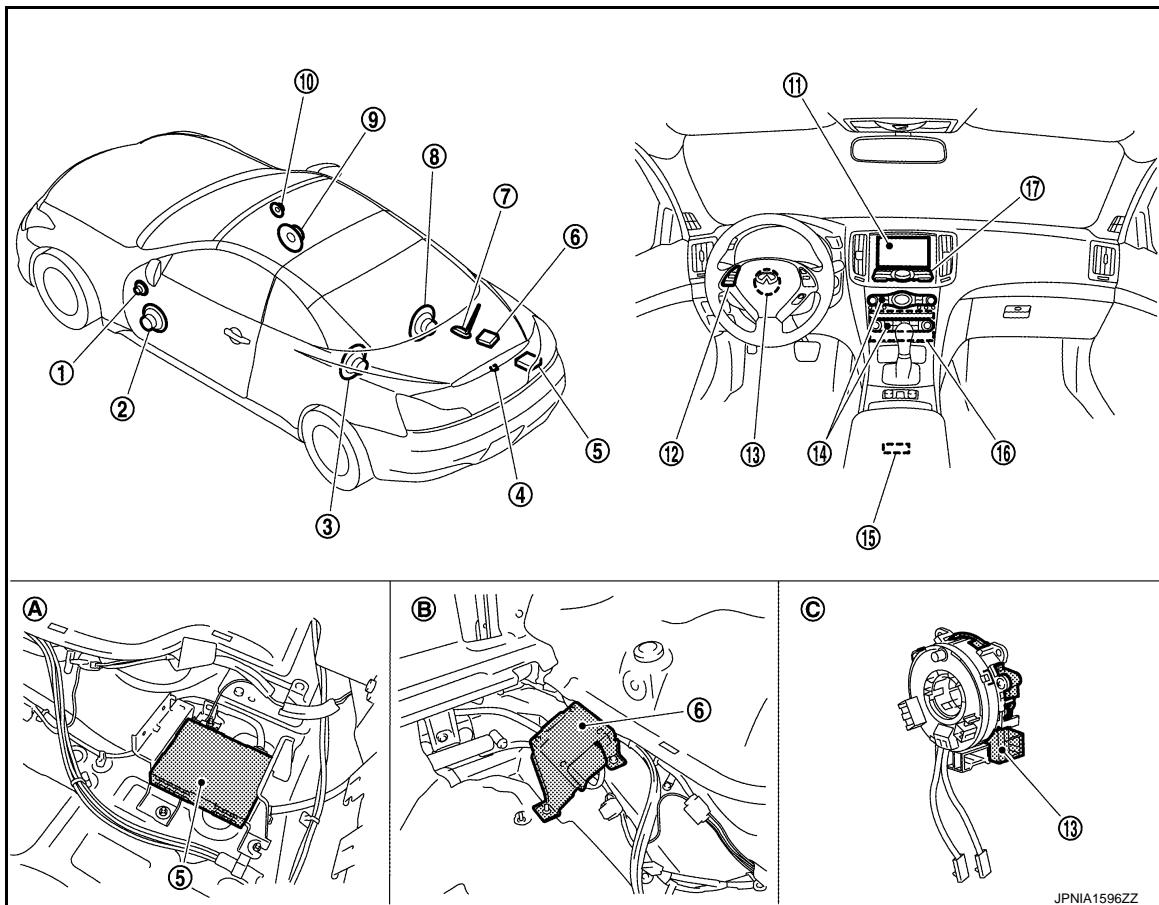
- CD changer (up to 6CDs) is built into AV control unit.
- AV control unit outputs the audio signal to each speaker when inserting the CD to AV control unit.

### Satellite Radio Mode

- Satellite radio tuner is controlled by communication signal and request signal with AV control unit.
- Sound signal (satellite radio) is received by satellite antenna and transmitted to AV control unit. AV control unit is output the sound signal (satellite radio) to each speaker.

## Component Parts Location

INFOID:000000004929606



- |  |                          |                        |
|--|--------------------------|------------------------|
| 1. Tweeter LH  | 2. Door speaker LH       | 3. Rear speaker LH     |
| 4. Rear view camera                                  | 5. Satellite radio tuner | 6. Camera control unit |
| 7. Antenna base (antenna amp. and satellite antenna) | 8. Rear speaker RH       | 9. Door speaker RH     |

JPNIA1596ZZ

# AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

- |                           |                          |                           |
|---------------------------|--------------------------|---------------------------|
| 10. Tweeter RH            | 11. Display unit         | 12. Steering switch       |
| 13. Steering angle sensor | 14. Preset switch        | 15. Auxiliary input jacks |
| 16. AV control unit       | 17. Multifunction switch |                           |
| A. Trunk room RH          | B. Trunk room RH         | C. Spiral cable part      |

## Component Description

INFOID:000000004371476

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>• The AM/FM receiving function and the CD playing function are equipped.</li> <li>• Outputs the audio signal from each function to each speaker.</li> </ul>
DISPLAY UNIT	<ul style="list-style-type: none"> <li>• Display image is controlled by the serial communication from AV control unit.</li> <li>• RGB image signal (audio operation condition) is input from AV control unit.</li> </ul>
DOOR SPEAKER	<ul style="list-style-type: none"> <li>• Outputs sound signal from AV control unit.</li> <li>• Outputs high, mid and low range sounds.</li> </ul>
REAR SPEAKER	<ul style="list-style-type: none"> <li>• Outputs sound signal from AV control unit.</li> <li>• Outputs high, mid and low range sounds.</li> </ul>
TWEETER	<ul style="list-style-type: none"> <li>• Outputs sound signal from AV control unit.</li> <li>• Outputs high range sound.</li> </ul>
MULTIFUNCTION SWITCH	<ul style="list-style-type: none"> <li>• Each audio operation can be operated.</li> <li>• Connected with preset switch via cable, and operation signal is transmitted to AV control unit via AV communication.</li> </ul>
PRESET SWITCH	<ul style="list-style-type: none"> <li>• Each audio and air conditioner operation can be operated.</li> <li>• Connected with multifunction switch via cable, and operation signal is transmitted to AV control unit via AV communication.</li> <li>• The CD ejection operating signal is performed by hardwire.</li> </ul>
STEERING SWITCH	<ul style="list-style-type: none"> <li>• Each audio operation can be operated.</li> <li>• Steering switch signal (operation signal) is output to AV control unit.</li> </ul>
ANTENNA BASE	<p>An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.</p> <p><b>ANTENNA AMP.</b></p> <ul style="list-style-type: none"> <li>• Radio signal received by rod antenna is amplified and transmitted to AV control unit.</li> </ul> <p><b>SATELLITE RADIO ANTENNA</b></p> <ul style="list-style-type: none"> <li>• Receives the satellite radio waves and outputs it to satellite radio tuner.</li> </ul>
SATELLITE RADIO TUNER	<ul style="list-style-type: none"> <li>• Inputs the satellite radio signal from satellite radio antenna and outputs the sound signal to the AV control unit.</li> <li>• It is controlled with the AV control unit and serial communication (communication signal and request signal).</li> </ul>

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AV

# REAR VIEW MONITOR SYSTEM

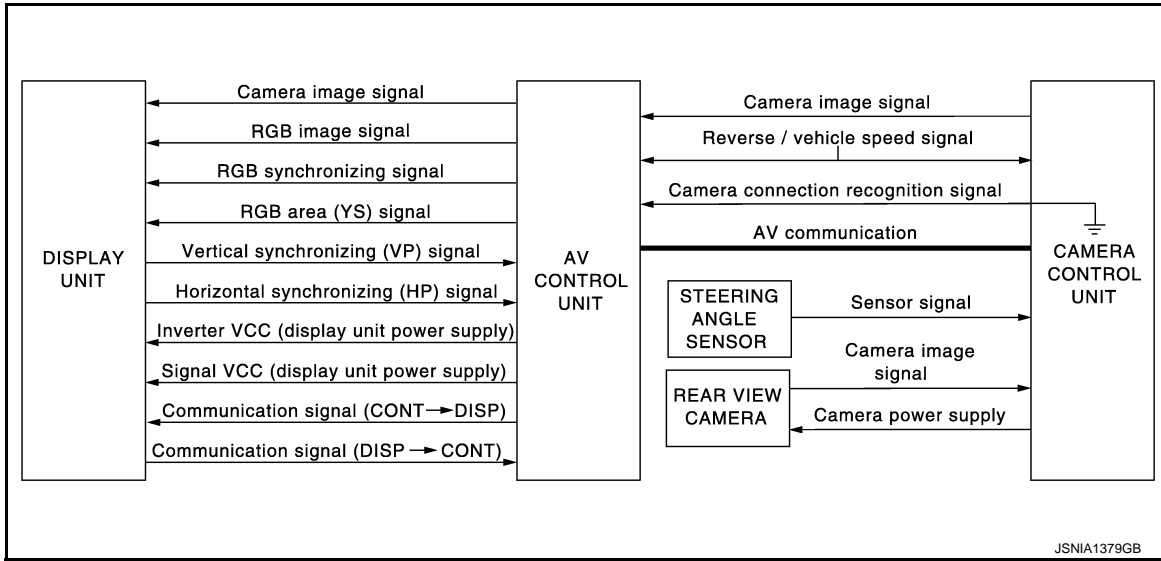
[BASE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

## REAR VIEW MONITOR SYSTEM

### System Diagram

INFOID:000000005038920



### System Description

INFOID:000000005038921

#### CAMERA IMAGE OPERATION PRINCIPLE

- Power is supplied to rear view camera from camera control unit and outputs camera image signal to camera control unit when selector lever is set to R position and the reverse signal on camera control unit is input.
- Camera control unit superimposes the guiding line and predicted course line to the image from rear view camera and outputs to display unit via AV control unit. In this case, the reverse signal is also input to AV control unit. Therefore, AV control unit recognizes the selector lever as in the reverse position. And then AV control unit switches the image displayed by the communication signal between AV control unit and display unit with the camera image. In addition, possible route lines are controlled by original sensor signal from steering angle sensor.
- The AV control unit determines whether rear view camera is equipped or not, based on the presence of camera connection recognition signal. It switches to rear view monitor image at the time of reverse signal input when it is equipped.
- AV control unit is connected in communication with camera control unit and display unit, and it controls operation of rear view monitor system.

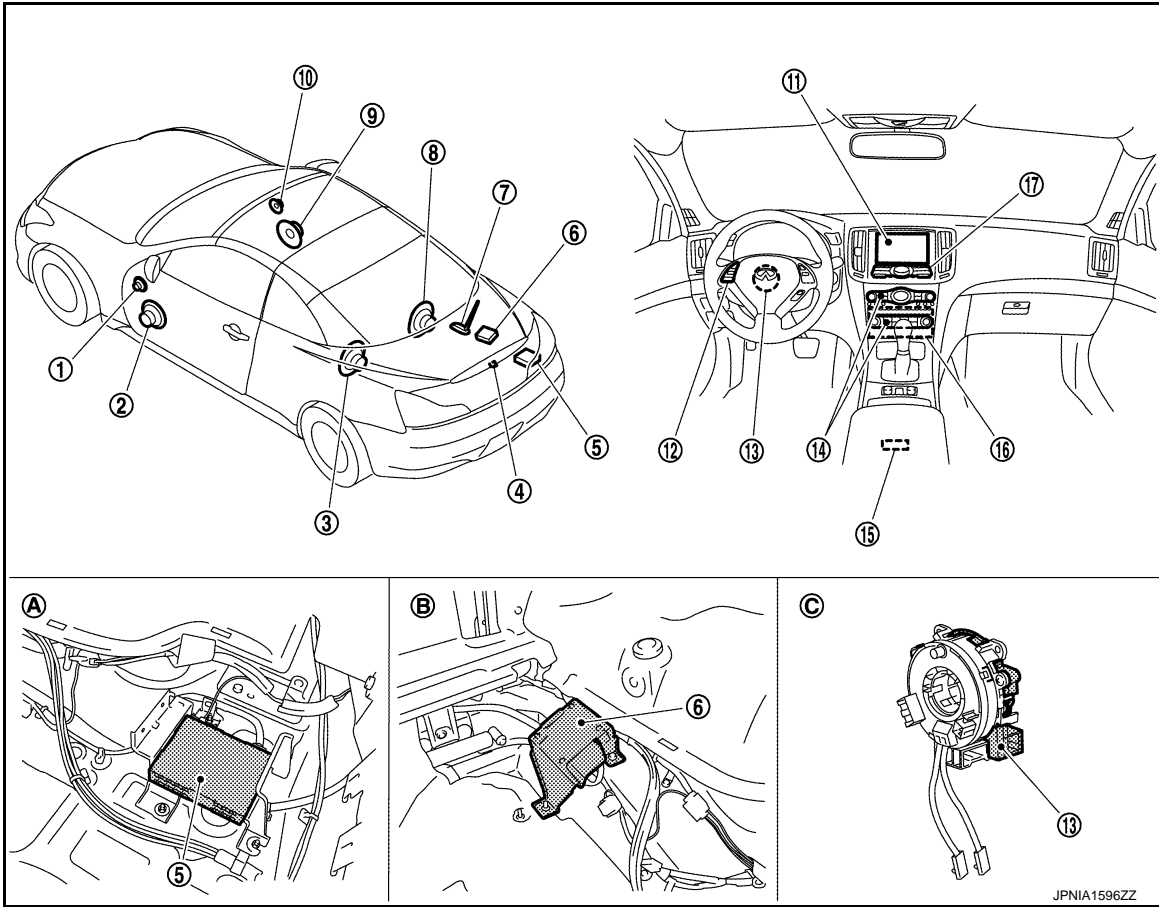
# REAR VIEW MONITOR SYSTEM

[BASE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

## Component Parts Location

INFOID:000000004932425



- |  |                          |                           |
|--|--------------------------|---------------------------|
| 1. Tweeter LH  | 2. Door speaker LH       | 3. Rear speaker LH        |
| 4. Rear view camera                                  | 5. Satellite radio tuner | 6. Camera control unit    |
| 7. Antenna base (antenna amp. and satellite antenna) | 8. Rear speaker RH       | 9. Door speaker RH        |
| 10. Tweeter RH                                       | 11. Display unit         | 12. Steering switch       |
| 13. Steering angle sensor                            | 14. Preset switch        | 15. Auxiliary input jacks |
| 16. AV control unit                                  | 17. Multifunction switch |                           |
| A. Trunk room RH                                     | B. Trunk room RH         | C. Spiral cable part      |

## Component Description

INFOID:0000000005038922

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>Image on display is changed to rear view monitor image with serial communication between AV control unit and display unit.</li> <li>Inputs camera image signal from camera control unit, and outputs it to display unit.</li> </ul>
DISPLAY UNIT	<ul style="list-style-type: none"> <li>Camera image signal is transmitted from camera control unit via AV control unit.</li> <li>Rear view monitor image is changed with the communication for AV control unit.</li> </ul>

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## REAR VIEW MONITOR SYSTEM

[BASE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

Part name	Description
CAMERA CONTROL UNIT	<ul style="list-style-type: none"><li>• Camera image signal is input from rear view camera, and camera image is indicated on the display unit via AV control unit.</li><li>• Power (camera ON signal) is transmitted to rear view camera.</li><li>• Controlled by AV communication transmitted from AV control unit.</li><li>• AV control unit recognizes the presence of camera system with camera connection recognition signal.</li></ul>
REAR VIEW CAMERA	The image of vehicle rear view is transmitted to camera control unit.
STEERING ANGLE SENSOR	Steering signal necessary for possible route line control is transmitted to camera control unit.



# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

## DIAGNOSIS SYSTEM (AV CONTROL UNIT)

### Diagnosis Description

INFOID:000000004371477

#### MULTIFUNCTION SWITCH AND PRESET SWITCH SELF-DIAGNOSIS FUNCTION

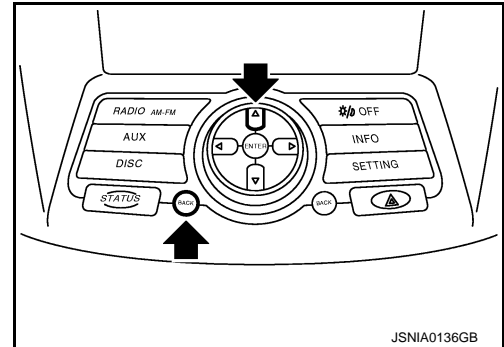
The ON/OFF operation (continuity) of each switch in the multifunction switch and preset switch can be checked.

##### Self-diagnosis Mode

- Press the “BACK” switch and the “UP” switch of the 4-direction switches within 10 seconds after turning the ignition switch from OFF to ACC and hold them for 3 seconds or more. The buzzer sounds, all indicators of the preset switch illuminate, and the self-diagnosis mode starts.
- The continuity of each switch at the ON position can be checked by pressing the switch. The buzzer sounds if the switch is normal.

##### CAUTION:

The hazard switch and CD eject switch cannot be checked.



##### Finishing Self-diagnosis Mode

Self-diagnosis mode is canceled when turning the ignition switch OFF.

#### MULTI AV SYSTEM ON BOARD DIAGNOSIS FUNCTION

- The AV control unit diagnosis function starts up with multifunction switch operation and the AV control unit performs a diagnosis for each unit in the system during the on board diagnosis.
- Perform a CONSULT-III diagnosis if the on board diagnosis does not start, e.g., the screen does not display anything, the multifunction switch does not function, etc.

#### ON BOARD DIAGNOSIS

##### Description

- The trouble diagnosis function has a self-diagnosis mode for conducting trouble diagnosis automatically and a confirmation/adjustment mode for operating manually.
- Self-diagnosis mode performs the AV control unit diagnosis and the connection diagnosis between each of the units that make up the system, and it indicates the results to the display.
- The confirmation/adjustment mode allows the technician to check, modify or adjust the vehicle signals and set values, as well as to monitor the system error records and system communication status. The checking, modifying or adjusting actions generally require human intervention and judgment (the system cannot make judgment automatically).

##### On Board Diagnosis Item

Mode	Description
Self-Diagnosis	<ul style="list-style-type: none"> <li>• AV control unit diagnosis.</li> <li>• Perform the connection diagnosis between each of the units.</li> </ul>

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AV

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

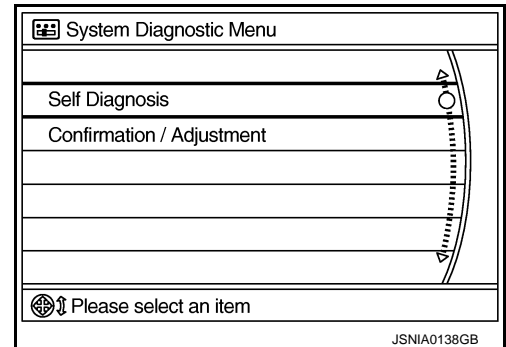
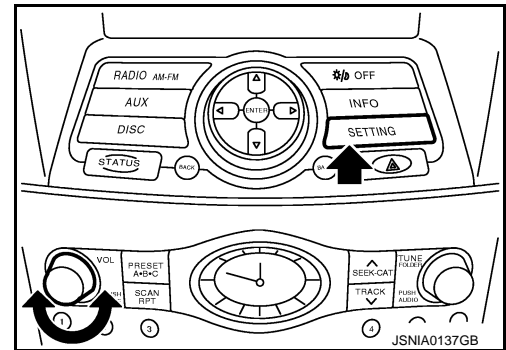
< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Mode	Description
Display Diagnosis	The confirmations of the tint with the color spectrum bar display and shading of color with the gradation bar display can be performed.
Vehicle Signals	Diagnosis of signals can be performed for vehicle speed, parking brake, lights, ignition switch, and reverse.
Speaker Test	The connection of a speaker can be confirmed by test tone.
Climate Control	Start auto air conditioner system self-diagnosis.
Error History	The system malfunction and the frequency when occurring in the past are displayed. When the malfunctioning item is selected, the time and place that the selected malfunction last occurred are displayed.
Camera Cont.	The signal connected to camera control unit can be checked and the guiding line position that overlaps rear view camera image can be adjusted.
Vehicle CAN Diagnosis	The transmitting/receiving of CAN communication can be monitored.
AV COMM Diagnosis	The communication condition of each unit of Multi AV system can be monitored.
Delete Unit Connection Log	Erase the connection history of unit and error history
Initialize Settings	Initializes the AV control unit memory.

## STARTING PROCEDURE

1. Start the engine.
2. Turn the audio system OFF.
3. While pressing the "SETTING" button, turn the volume control dial clockwise or counterclockwise for 40 clicks or more. (When the self-diagnosis mode is started, a short beep will be heard.)
  - Shifting from current screen to previous screen is performed by pressing "BACK" button.
4. The trouble diagnosis initial screen is displayed, and then the items of "Self Diagnosis" and "Confirmation/Adjustment" can be selected.



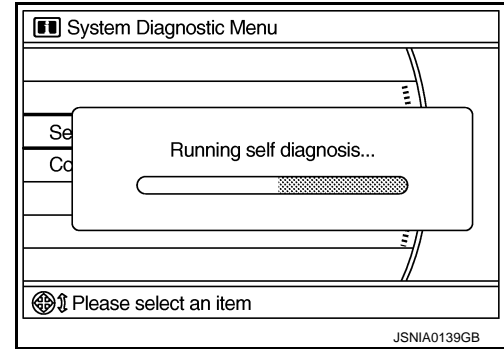
## SELF-DIAGNOSIS MODE

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

[BASE AUDIO WITHOUT NAVIGATION]

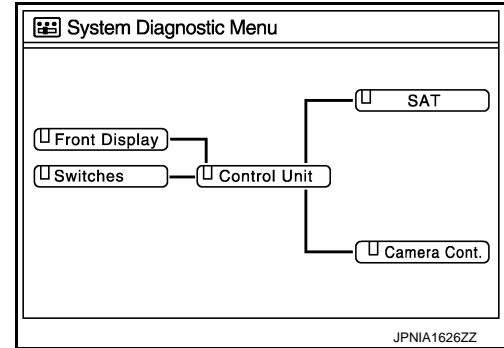
## < SYSTEM DESCRIPTION >

1. Start the self-diagnosis function and select "Self-diagnosis".
  - Self-diagnosis subdivision screen is displayed, and the self-diagnosis mode starts.
  - The bar graph visible on the center of the self-diagnosis subdivision screen indicates progress of the trouble diagnosis.



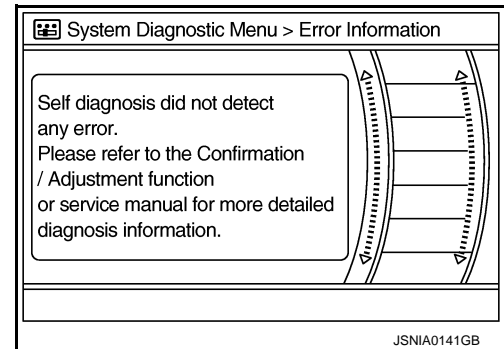
2. Diagnosis results are displayed after the self-diagnosis is completed. The unit names and the connection lines are color-coded according to the diagnostic results.

Diagnosis results	Unit	Connection line
Normal	Green	Green
Connection malfunction	Gray	Yellow
Unit malfunction <sup>Note</sup>	Red	Green



### NOTE:

- Only the control unit (AV control unit) is displayed in red.
- Replace AV control unit if "Self-Diagnosis did not run because of a control unit malfunction" is indicated. The symptom is AV control unit internal error. Refer to [AV-154, "Exploded View"](#).
- If multiple errors occur at the same time for a single unit, the screen switch colors are determined according to the following order of priority: red > gray.
- The comments of the self-diagnosis results can be viewed with a component in the diagnosis result screen.



### Detection Range of Self-diagnosis Mode

- The self-diagnosis mode allows the technician to diagnose the connection in the communication line between AV control unit and each unit and the internal operation of the AV control unit.
- Because the start condition of diagnosis function is a switch operation, the on board diagnosis function cannot be started up if any malfunction is detected in the communication circuit between AV control unit and multifunction switch.

## SELF-DIAGNOSIS RESULTS

Check the applicable display at the following table, and then repair the malfunctioning parts.

Self-diagnosis result chart

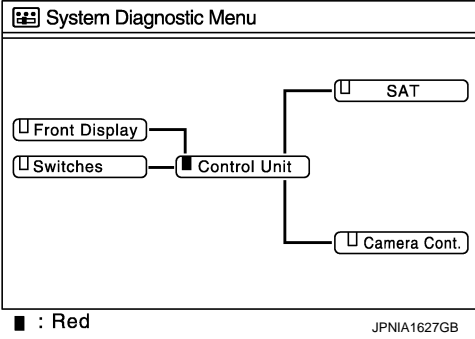
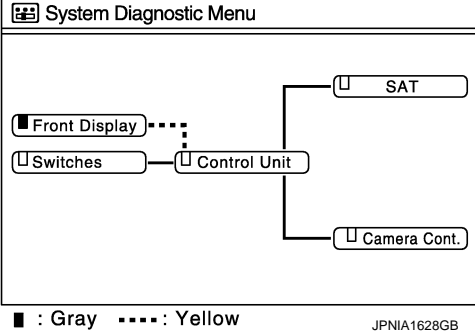
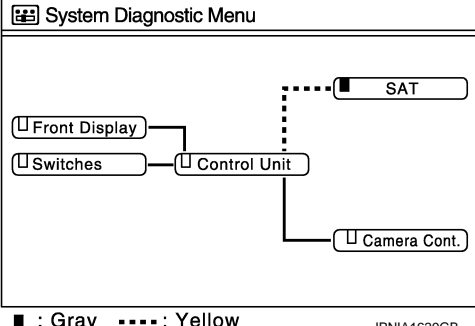
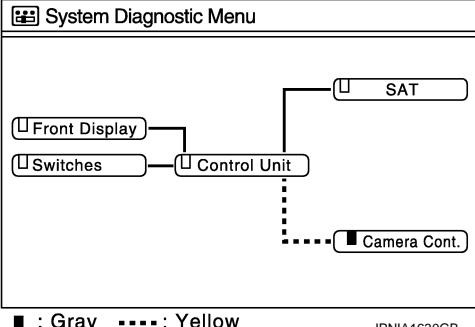
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AV

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Area with yellow connection lines	Description	Possible malfunction location / Action to take
 <p>■ : Red JPNIA1627GB</p>	<p>AV control unit malfunction is detected.</p>	<p>Replace the AV control unit.</p>
<p>“Self-Diagnosis did not run because of a control unit malfunction”</p>  <p>■ : Gray - - - - : Yellow JPNIA1628GB</p>	<ul style="list-style-type: none"> <li>• Malfunction is detected in communication circuit between AV control unit and display unit.</li> <li>• Malfunction is detected in communication signal between AV control unit and display unit.</li> </ul>	<p>Communication circuit between AV control unit and display unit.</p>
 <p>■ : Gray - - - - : Yellow JPNIA1629GB</p>	<ul style="list-style-type: none"> <li>• Satellite radio tuner power supply and ground circuit malfunction is detected.</li> <li>• Malfunction is detected in communication circuits between AV control unit and satellite radio tuner.</li> <li>• Malfunction is detected in communication signal between AV control unit and satellite radio tuner.</li> <li>• Malfunction is detected in request signal circuit between AV control unit and satellite radio tuner.</li> </ul>	<ul style="list-style-type: none"> <li>• Satellite radio tuner power supply and ground</li> <li>• Communication circuit between AV control unit and satellite radio tuner.</li> <li>• Request signal circuit between AV control unit and satellite radio tuner.</li> </ul>
 <p>■ : Gray - - - - : Yellow JPNIA1630GB</p>	<p>Camera connection recognition signal circuit malfunction is detected.</p>	<p>Camera connection recognition signal circuit.</p>

## CONFIRMATION/ADJUSTMENT MODE

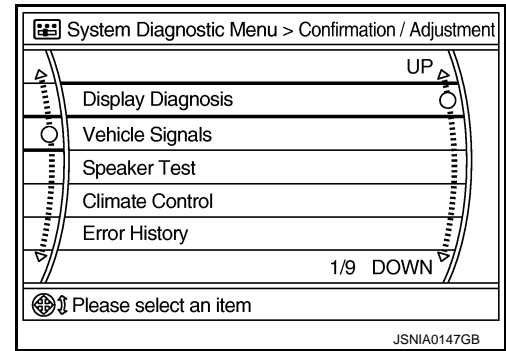
1. Start the diagnosis function and select “Confirmation/Adjustment”. The confirmation/adjustment mode indicates where each item can be checked or adjusted.

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

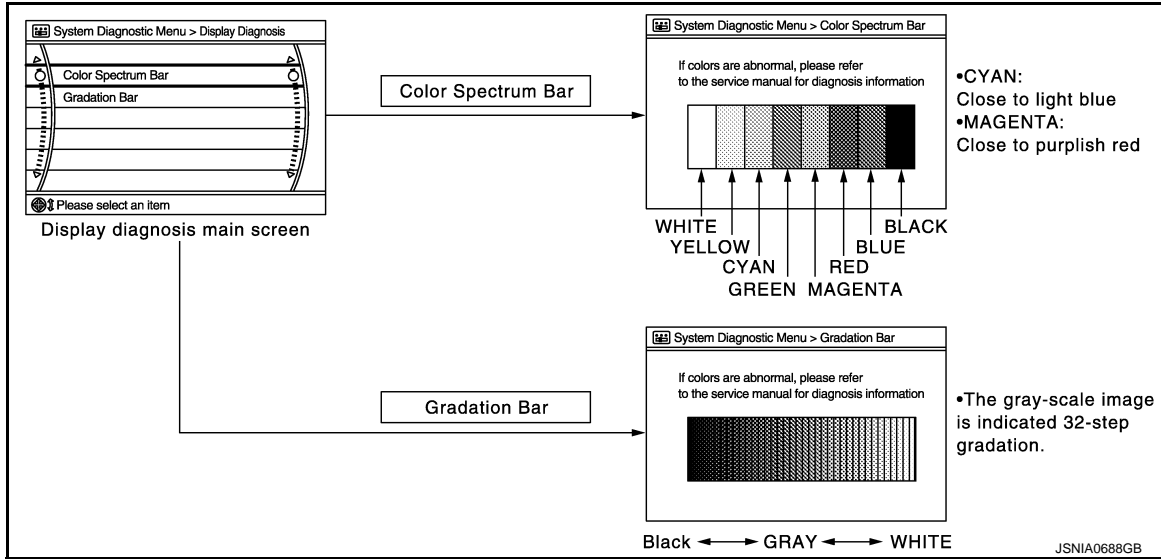
[BASE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

- Select each switch on the "Confirmation / Adjustment" screen to display the relevant trouble diagnosis screen. Press the "BACK" switch to return to the initial "Confirmation / Adjustment" screen.



## Display Diagnosis

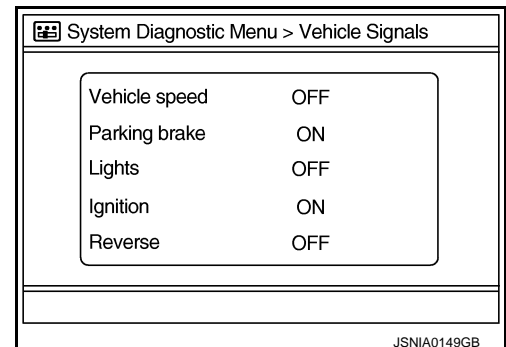


The tint of the color bar indication is as per the following list if RGB signal error is detected.

- R (red) signal error** : Light blue (Cyan) tint
- G (green) signal error** : Purple (Magenta) tint
- B (blue) signal error** : Yellow tint

## Vehicle Signals

A comparison check can be made of each actual vehicle signal and the signals recognized by the system.



Diagnosis item	Display	Vehicle status	Remarks
Vehicle speed	ON	Vehicle speed > 0 km/h (0 MPH)	Changes in indication may be delayed. This is normal.
	OFF	Vehicle speed = 0 km/h (0 MPH)	
Parking brake	ON	Parking brake is applied.	
	OFF	Parking brake is released.	

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Diagnosis item	Display	Vehicle status	Remarks
Lights	ON	Light switch ON	—
	OFF	Light switch OFF	
Ignition	ON	Ignition switch ON	—
	OFF	Ignition switch in ACC position	
Reverse	ON	Shift the selector lever to "R" position	Changes in indication may be delayed. This is normal.
	OFF	Shift the selector lever other than "R" position	

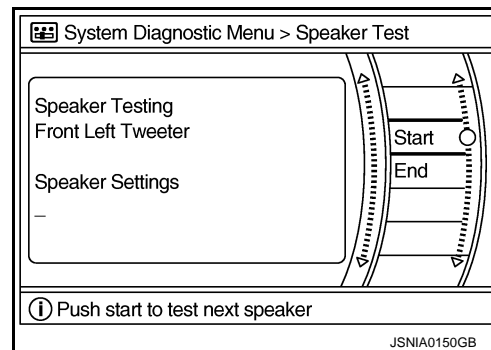
## Speaker Test

Select "Speaker Test" to display the Speaker test screen. Press "Start" to generate a test tone in a speaker. Press "Start" again to generate a test tone in the next speaker. Press "End" to stop the test tones.

### NOTE:

The frequency of test tone emitted from each speaker is as follows.

- Tweeter** : 3 kHz
- Front speaker** : 300 Hz
- Rear speaker** : 1 kHz



## Climate Control

Refer to "HEATER & AIR CONDITIONING CONTROL SYSTEM" for details.

## Error History

The self-diagnosis results are judged depending on whether any error occurs from when "Self-diagnosis" is selected until the self-diagnosis results are displayed.

However, the diagnosis results are judged normal if an error has occurred before the ignition switch is turned ON and then no error has occurred until the self-diagnosis start. Check the "Error Record" to detect any error that may have occurred before the self-diagnosis start because of this situation.

### Count up method A

- The counter resets to 0 if an error occurs when ignition switch is turned ON. The counter increases by 1 if the condition is normal at a next ignition switch ON cycle.
- The counter upper limit is 39. Any counts exceeding 39 are ignored. The counter can be reset (no error record display) with the "Delete log" switch or CONSULT-III.

### Count up method B

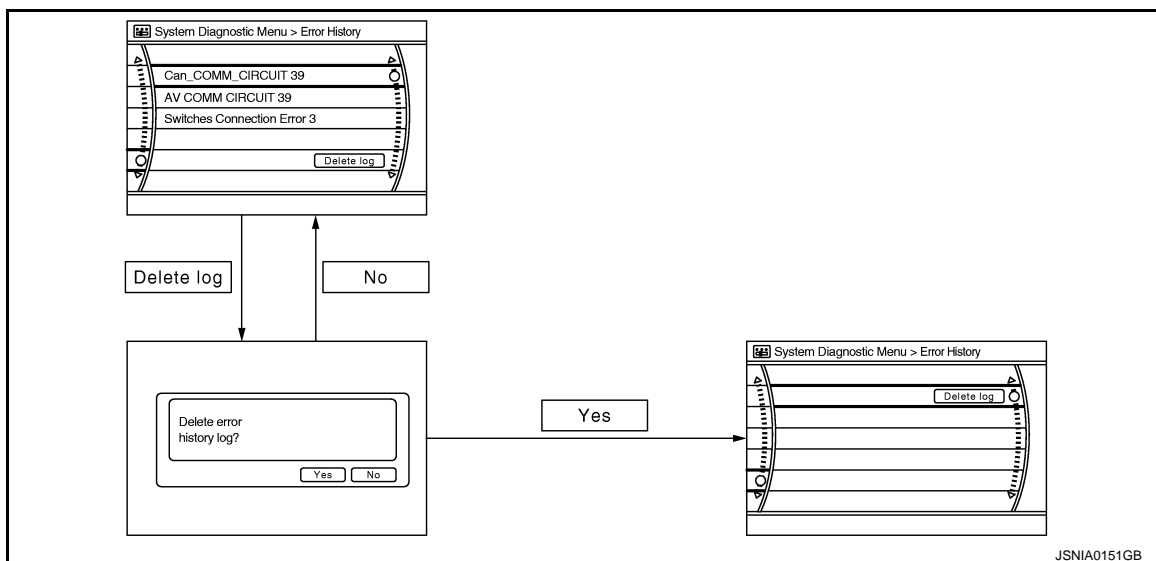
- The counter increases by 1 if an error occurs when ignition switch is ON. The counter will not decrease even if the condition is normal at the next ignition switch ON cycle.
- The counter upper limit is 50. Any counts exceeding 50 are ignored. The counter can be reset (no error record display) with the "Delete log" switch or CONSULT-III.

Display type of occurrence frequency	Error history display item
Count up method A	CAN communication line, control unit (CAN), AV communication line, control unit (AV)
Count up method B	Other than the above

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]



## Error item

Some error items may be displayed simultaneously according to the cause. If some error items are displayed simultaneously, the detection of the cause can be performed by the combination of display items

Error item	Description	Possible malfunction factor/Action to take
CAN COMM CIRCUIT	CAN communication malfunction is detected.	Perform diagnosis with CONSULT-III, and then repair the malfunctioning parts according to the diagnosis results. Refer to <a href="#">AV-34. "CONSULT - III Function (MULTI AV)".</a>
CONTROL UNIT (CAN)	CAN initial diagnosis malfunction is detected.	Replace the AV control unit.
CONTROL UNIT (AV)	AV communication circuit initial diagnosis malfunction is detected.	
FLASH-ROM Error Of Control Unit CAN Controller Memory Error	AV control unit malfunction is detected.	
Front Display Connection Error	<ul style="list-style-type: none"> <li>Display unit power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in communication circuit between AV control unit and display unit.</li> <li>Malfunction is detected in communication signal between AV control unit and display unit.</li> </ul>	<ul style="list-style-type: none"> <li>Display unit power supply and ground circuit.</li> <li>Communication circuit between AV control unit and display unit.</li> </ul>
Camera Control Unit Connection Error	Malfunction is detected in camera connection recognition circuit between AV control unit and camera control unit.	Camera connection recognition circuit between AV control unit and camera control unit.
SAT Connection Error	<ul style="list-style-type: none"> <li>Satellite radio tuner power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in communication circuit between AV control unit and satellite radio tuner.</li> <li>Malfunction is detected in communication signal between AV control unit and satellite radio tuner.</li> <li>Malfunction is detected in request signal circuit between AV control unit and satellite radio tuner.</li> </ul>	<ul style="list-style-type: none"> <li>Satellite radio tuner power supply and ground circuit.</li> <li>Communication circuit between AV control unit and satellite radio tuner.</li> <li>Request signal circuit between AV control unit and satellite radio tuner.</li> </ul>

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# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

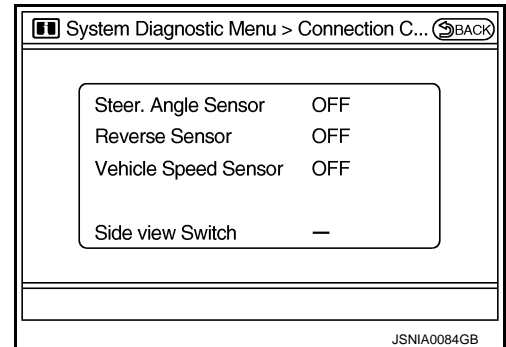
Error item	Description	Possible malfunction factor/Action to take
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Switches Connection Error</li> </ul>	<ul style="list-style-type: none"> <li>• Multifunction switch power supply and ground circuit malfunction is detected.</li> <li>• Malfunction is detected in AV communication circuit between AV control unit and multifunction switch.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and multifunction switch.</li> </ul>	<ul style="list-style-type: none"> <li>• Multifunction switch power supply and ground circuits.</li> <li>• AV communication circuit between AV control unit and multifunction switch.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Rearview Camera Connection Error</li> </ul>	<ul style="list-style-type: none"> <li>• Camera control unit power supply and ground circuits malfunction is detected.</li> <li>• Malfunction is detected in AV communication circuit between multifunction switch and camera control unit.</li> <li>• Malfunction is detected in AV communication signal between multifunction switch and camera control unit.</li> </ul>	<ul style="list-style-type: none"> <li>• Camera control unit power supply and ground circuits.</li> <li>• AV communication circuit between multifunction switch and camera control unit.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Switches Connection Error</li> <li>• Rearview Camera Connection Error</li> </ul>	<ul style="list-style-type: none"> <li>• Malfunction is detected in AV communication circuit between AV control unit and multifunction switch.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and multifunction switch.</li> </ul>	<p>AV communication circuit between AV control unit and multifunction switch.</p>

Camera Cont.

The two functions of “Connection Confirmation” and “Adjust Offset of Rear View Camera” are available.

### CONNECTION CONFIRMATION

The steering angle sensor, reverse signal and vehicle speed sensor can be inspected.



Diagnosis item	Display	Vehicle status
Steer. Angle Sensor	ON	When steering the vehicle with ignition switch ON (remains ON until connection mode is stopped when it is turned ON)
	OFF	<ul style="list-style-type: none"> <li>• Ignition switch at ACC</li> <li>• No steering with ignition switch ON</li> </ul>
	—	Malfunction detected in camera connection recognition signal
Reverse Sensor	ON	Selector lever is in “R” with ignition switch ON.
	OFF	<ul style="list-style-type: none"> <li>• Ignition switch at ACC</li> <li>• Selector lever is in position other than “R” with ignition switch ON.</li> </ul>
	—	Malfunction detected in camera-connection recognition signal
Vehicle Speed Sensor	ON	Vehicle speed is more than 0 km/h (0 MPH) with ignition switch ON
	OFF	<ul style="list-style-type: none"> <li>• Ignition switch at ACC</li> <li>• Vehicle speed is 0 km/h (0 MPH) with ignition switch ON</li> </ul>
	—	Malfunction detected in camera connection recognition signal
Side view Switch	—	Not used

### ADJUST OFFSET OF REAR VIEW CAMERA

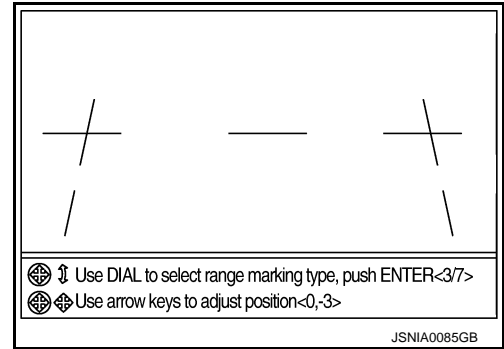


# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

[BASE AUDIO WITHOUT NAVIGATION]

## < SYSTEM DESCRIPTION >

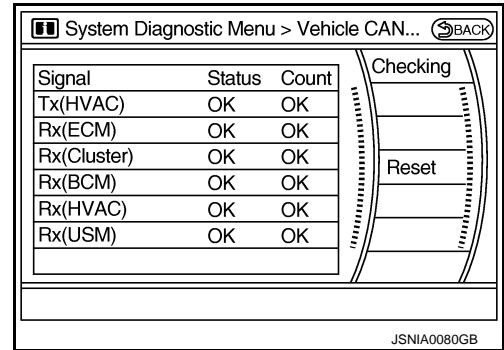
Use this mode to adjust the guide line display position of the rear-view monitor if necessary after removing the rear view monitor camera.



### Vehicle CAN Diagnosis

- CAN communication status and error counter is displayed.
- The error counter displays “OK” if any malfunction was not detected in the past and displays “0” if a malfunction is detected. It increases by 1 if the condition is normal at the next ignition switch ON cycle. The upper limit of the counter is 39.
- The error counter is erased if reset.

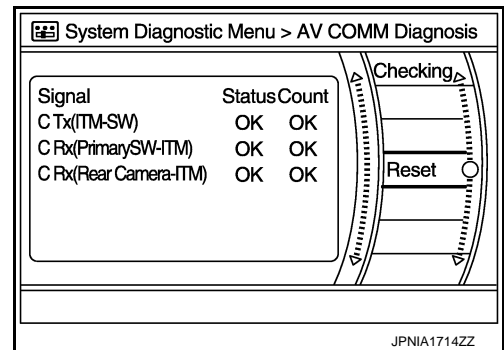
Items	Display (Current)	Malfunction counter (Past)
Tx (HVAC)	OK / UNKWN	OK / 0 – 39
Rx (ECM)	OK / UNKWN	OK / 0 – 39
Rx (Cluster)	OK / UNKWN	OK / 0 – 39
Rx (BCM)	OK / UNKWN	OK / 0 – 39
Rx (HVAC)	OK / UNKWN	OK / 0 – 39
Rx (USM)	OK / UNKWN	OK / 0 – 39



### AV COMM Diagnosis

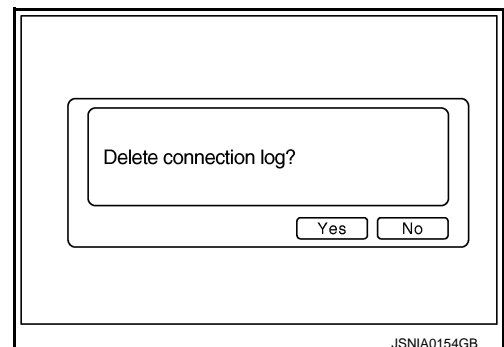
- Displays the communication status between AV control unit (master unit) and each unit.
- The error counter displays “OK” if any malfunction was not detected in the past and displays “0” if a malfunction is detected. It increases by 1 if the condition is normal at the next ignition switch ON cycle. The upper limit of the counter is 39.
- If it resets, the error counter is erased.

Items	Status (Current)	Counter (Past)
C Tx (ITM-SW)	OK / UNKWN	OK / 0 - 39
C Rx (PrimarySW-ITM)	OK / UNKWN	OK / 0 - 39
C Rx (Rear Camera-ITM)	OK / UNKWN	OK / 0 - 39



### Delete Unit Connection Log

Deletes any unit connection records and error records from the AV control unit memory. (Clear the records of the unit that has been removed)



Initialize Settings

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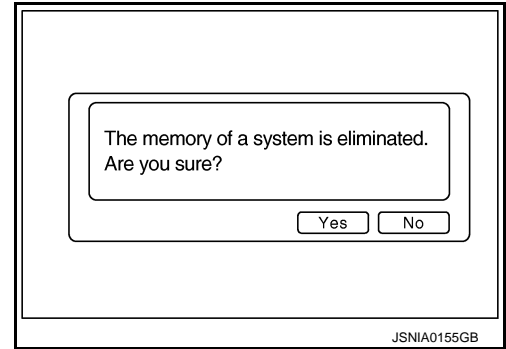
AV

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Initializes the AV control unit memory.



## CONSULT - III Function (MULTI AV)

INFOID:000000004371478

### CONSULT-III FUNCTIONS

CONSULT-III performs the following functions via the communication with the AV control unit.

Diagnosis mode	Description
Ecu Identification	The part number of AV control unit can be checked.
Self Diagnostic Result	Performs a diagnosis on the AV control unit and a connection diagnosis for the communication circuit of the Multi AV system, and displays the current and past malfunctions collectively.
Data Monitor	The diagnosis of vehicle signal that is input to the AV control unit can be performed.

### AV COMMUNICATION

When "AV communication" of "CAN Diag Support Monitor" is selected, the following function will be performed.

AV communication	AV&NAVI C/U	Displays the communication status from AV control unit to each unit as well as the error counter.
	AUDIO	Displays the AV control unit communication status and the error counter.

### ECU IDENTIFICATION

The part number of AV control unit is displayed.

### SELF DIAGNOSIS RESULT

- In CONSULT-III self-diagnosis, self-diagnosis results and error history are displayed collectively.
- The current malfunction indicates "CRNT". The past malfunction indicates "PAST".
- The timing is displayed as "0" if any of the error codes [U1000], [U1010], [U1300] and [U1310] is detected. The counter increases by 1 if the condition is normal at the next ignition switch ON cycle.

Self-diagnosis results display item

Error item	Description	Possible malfunction factor/Action to take
CAN COMM CIRCUIT [U1000]	CAN communication malfunction is detected.	Perform diagnosis with CONSULT-III, and then repair the malfunctioning parts according to the diagnosis results. Refer to <a href="#">AV-37. "Diagnosis Procedure"</a> .
CONTROL UNIT (CAN) [U1010]	CAN initial diagnosis malfunction is detected.	Replace the AV control unit.
CONTROL UNIT (AV) [U1310]	AV communication circuit initial diagnosis malfunction is detected.	
Cont Unit FLASH-ROM [U1200]	AV control unit malfunction is detected.	
CAN CONT [U1216]		

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
FRONT DISP CONN [U1243]	<ul style="list-style-type: none"> <li>Display unit power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in communication circuit between AV control unit and display unit.</li> <li>Malfunction is detected in communication signal between AV control unit and display unit.</li> </ul>	<ul style="list-style-type: none"> <li>Display unit power supply and ground circuit.</li> <li>Communication circuit between AV control unit and display unit.</li> </ul>
CAMERA CONT. CONN [U1250]	Malfunction is detected in camera connection recognition circuit between AV control unit and camera control unit.	Camera connection recognition circuit between AV control unit and camera control unit.
SAT CONN [U1255]	<ul style="list-style-type: none"> <li>Satellite radio tuner power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in communication circuit between AV control unit and satellite radio tuner.</li> <li>Malfunction is detected in communication signal between AV control unit and satellite radio tuner.</li> <li>Malfunction is detected in request signal circuit between AV control unit and satellite radio tuner.</li> </ul>	<ul style="list-style-type: none"> <li>Satellite radio tuner power supply and ground circuit.</li> <li>Communication circuit between AV control unit and satellite radio tuner.</li> <li>Request signal circuit between AV control unit and satellite radio tuner.</li> </ul>
<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>SWITCH CONN [U1240]</li> </ul>	<ul style="list-style-type: none"> <li>Multifunction switch power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in AV communication circuit between AV control unit and multifunction switch.</li> <li>Malfunction is detected in AV communication signal between AV control unit and multifunction switch.</li> </ul>	<ul style="list-style-type: none"> <li>Multifunction switch power supply and ground circuits.</li> <li>AV communication circuit between AV control unit and multifunction switch.</li> </ul>
<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>REAR CAMERA LAN CONN [U1252]</li> </ul>	<ul style="list-style-type: none"> <li>Camera control unit power supply and ground circuits malfunction is detected.</li> <li>Malfunction is detected in AV communication circuit between multifunction switch and camera control unit.</li> <li>Malfunction is detected in AV communication signal between multifunction switch and camera control unit.</li> </ul>	<ul style="list-style-type: none"> <li>Camera control unit power supply and ground circuits.</li> <li>AV communication circuit between multifunction switch and camera control unit.</li> </ul>
<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>SWITCH CONN [U1240]</li> <li>REAR CAMERA LAN CONN [U1252]</li> </ul>	<ul style="list-style-type: none"> <li>Malfunction is detected in AV communication circuit between AV control unit and multifunction switch.</li> <li>Malfunction is detected in AV communication signal between AV control unit and multifunction switch.</li> </ul>	AV communication circuit between AV control unit and multifunction switch.

## DATA MONITOR

### ALL SIGNALS

- Displays the status of the following vehicle signals inputted into the AV control unit.
- For each signal, actual signal can be compared with the condition recognized on the system.

Display Item	Display	Vehicle status	Remarks
VHCL SPD SIG	On	Vehicle speed >0 km/h (0 MPH)	Changes in indication may be delayed. This is normal.
	Off	Vehicle speed =0 km/h (0 MPH)	
PKB SIG	On	Parking brake is applied.	
	Off	Parking brake is released.	

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BASE AUDIO WITHOUT NAVIGATION]

Display Item	Display	Vehicle status	Remarks
ILLUM SIG	On	Light switch ON	—
	Off	Light switch OFF	
IGN SIG	On	Ignition switch ON	
	Off	Ignition switch in ACC position	
REV SIG	On	Shift the selector lever to "R" position	Changes in indication may be delayed. This is normal.
	Off	Shift the selector lever other than "R" position	

## SELECTION FROM MENU

Allows the technician to select which vehicle signals should be displayed and displays the status of the selected vehicle signals.

Item to be selected	Description
VHCL SPD SIG	The same as when "ALL SIGNALS" is selected.
PKB SIG	
ILLUM SIG	
IGN SIG	
REV SIG	

# U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## DTC/CIRCUIT DIAGNOSIS

### U1000 CAN COMM CIRCUIT

#### Description

INFOID:000000004931950

CAN (Controller Area Network) is a serial communication line for real-time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independently). In CAN communication, control units are connected with 2 communication lines (CAN-H, CAN-L) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Signal Chart. Refer to [LAN-25, "CAN System Specification Chart"](#).

#### DTC Logic

INFOID:000000004931951

#### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	Diagnostic item is detected when ...	Probable malfunction location
U1000	CAN COMM CIRCUIT	AV control unit is not transmitting or receiving CAN communication signal for 2 seconds or more.	CAN communication system.

#### Diagnosis Procedure

INFOID:000000004931952

#### 1. PERFORM SELF-DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check "Self Diagnostic Result" of "MULTI AV".

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to "LAN system". Refer to [LAN-16, "Trouble Diagnosis Flow Chart"](#).  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

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# U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## U1010 CONTROL UNIT (CAN)

### Description

INFOID:000000004931953

Initial diagnosis of AV control unit.

### DTC Logic

INFOID:000000004931954

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	Diagnostic item is detected when ...	Probable malfunction location
U1010	CONTROL UNIT (CAN)	CAN initial diagnosis malfunction is detected.	AV control unit.

### Diagnosis Procedure

INFOID:000000004931955

#### 1. REPLACE AV CONTROL UNIT

When DTC U1010 is detected, replace AV control unit.

>> INSPECTION END

# U1310 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## U1310 AV CONTROL UNIT

### Description

INFOID:000000004931059

Replace the AV control unit if this DTC is displayed. Refer to [AV-154, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• AV control unit includes audio function and vehicle information function.</li><li>• It is connected to ECM and unified meter and A/C amp via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li><li>• Auxiliary image signal and auxiliary sound signal are input from the auxiliary input jacks.</li></ul>

### DTC Logic

INFOID:000000004371486

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1310	CONTROL UNIT (AV) [U1310]	An initial diagnosis error is detected in AV communication circuit.	Replace AV control unit.

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# U1200 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## U1200 AV CONTROL UNIT

### Description

INFOID:000000004931060

Replace the AV control unit if this DTC is displayed. Refer to [AV-154, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• AV control unit includes audio function and vehicle information function.</li><li>• It is connected to ECM and unified meter and A/C amp via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li><li>• Auxiliary image signal and auxiliary sound signal are input from the auxiliary input jacks.</li></ul>

### DTC Logic

INFOID:000000004371488

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1200	Cont Unit FLASH- ROM [U1200]	An internal malfunction is detected in AV control unit (FLASH-ROM).	Replace AV control unit.



# U1216 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## U1216 AV CONTROL UNIT

### Description

INFOID:000000004931061

Replace the AV control unit if this DTC is displayed. Refer to [AV-154, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• AV control unit includes audio function and vehicle information function.</li><li>• It is connected to ECM and unified meter and A/C amp via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li><li>• Auxiliary image signal and auxiliary sound signal are input from the auxiliary input jacks.</li></ul>

### DTC Logic

INFOID:000000004371490

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1216	CAN CONT [U1216]	Internal malfunction of AV control unit (CAN controller) is detected.	Replace AV control unit.

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# U1243 DISPLAY UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## U1243 DISPLAY UNIT

### Description

INFOID:000000005184875

Part name	Description
DISPLAY UNIT	<ul style="list-style-type: none"><li>• Display image is controlled by the serial communication from AV control unit.</li><li>• RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing).</li><li>• Synchronizing signal (HP, VP) is output to AV control unit.</li><li>• Auxiliary image signal and camera image signal are input from AV control unit.</li></ul>

### DTC Logic

INFOID:000000005129837

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1243	FRONT DISP CONN [U1243]	<ul style="list-style-type: none"><li>• Display unit power supply and ground circuit malfunction is detected</li><li>• Malfunction is detected in communication circuit between AV control unit and display unit</li><li>• Malfunction is detected in communication signal between AV control unit and display unit</li></ul>	<ul style="list-style-type: none"><li>• Display unit power supply and ground circuit.</li><li>• Communication circuit between AV control unit and display unit.</li></ul>

### Diagnosis Procedure

INFOID:000000005129838

#### 1. CHECK DISPLAY UNIT POWER SUPPLY AND GROUND CIRCUIT

Check display unit power supply and ground circuit. Refer to [AV-48. "DISPLAY UNIT : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

#### 2. CHECK CONTINUITY COMMUNICATION CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminals	Connector	Terminals	
M71	11	M83	56	Existed
	22		44	

4. Check continuity between display unit harness connector and ground.

Display unit		Ground	Continuity
Connector	Terminals		
M71	11		Not existed
	22		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

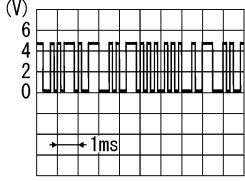
#### 3. CHECK COMMUNICATION SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

# U1243 DISPLAY UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	11	Ground	When adjusting display brightness.	 <p>PKIB5039J</p>

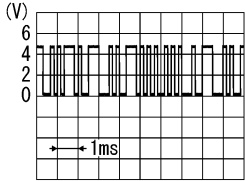
Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

## 4. CHECK COMMUNICATION SIGNAL

Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	22	Ground	When adjusting display brightness.	 <p>PKIB5039J</p>

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace display unit.

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# U1250 CAMERA CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## U1250 CAMERA CONTROL UNIT

### Description

INFOID:000000005129839

Part name	Description
CAMERA CONTROL UNIT	<ul style="list-style-type: none"><li>• Camera image signal is input from rear view camera, and camera image is indicated on the display.</li><li>• Power (camera ON signal) is transmitted to rear view camera.</li><li>• Controlled by AV communication transmitted from AV control unit.</li><li>• AV control unit recognizes the presence of camera system with camera connection recognition signal.</li></ul>

### DTC Logic

INFOID:000000005129840

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1250	CAMERA CONT. CONN [U1250]	Malfunction is detected in camera connection recognition signal circuit.	Camera connection recognition signal circuit.

### Diagnosis Procedure

INFOID:000000005129841

#### 1. CHECK CAMERA CONNECTION RECOGNITION SIGNAL CIRCUIT

1. Disconnect AV control unit connector and camera control unit connector.
2. Check continuity between AV control unit harness connector and camera control unit harness connector.

AV control unit		Camera control unit		Continuity
Connector	Terminal	Connector	Terminal	
M84	68	B241	14	Existed

#### Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK AV CONTROL UNIT VOLTAGE

1. Connect AV control unit connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit harness connector and ground.

(+)		(-)	Voltage (Approx.)
AV control unit			
Connector	Terminal		
M84	68	Ground	5.0 V

#### Is the inspection result normal?

- YES >> Replace camera control unit.  
NO >> Replace AV control unit.

# U1255 SATELLITE RADIO TUNER

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## U1255 SATELLITE RADIO TUNER

### Description

INFOID:000000005129842

Part name	Description
SATELLITE RADIO TUNER	<ul style="list-style-type: none"> <li>Inputs the satellite radio signal from satellite radio antenna and outputs it to the AV control unit.</li> <li>It is controlled with the communication (communication signal, request signal) from AV control unit.</li> </ul>

### DTC Logic

INFOID:000000005129843

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1255	SAT CONN [U1255]	<ul style="list-style-type: none"> <li>Satellite radio tuner power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in communication circuit between AV control unit and satellite radio tuner.</li> <li>Malfunction is detected in communication signal between AV control unit and satellite radio tuner.</li> <li>Malfunction is detected in request signal circuit between AV control unit and satellite radio tuner.</li> </ul>	<ul style="list-style-type: none"> <li>Satellite radio tuner power supply and ground circuit.</li> <li>Communication circuit between AV control unit and satellite radio tuner.</li> <li>Request signal circuit between AV control unit and satellite radio tuner.</li> </ul>

### Diagnosis Procedure

INFOID:000000005129844

#### 1. CHECK SATELLITE RADIO TUNER POWER SUPPLY AND GROUND CIRCUIT

Check satellite radio tuner power supply and ground circuit. Refer to [AV-51, "SATELLITE RADIO TUNER : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

#### 2. CHECK CONTINUITY COMMUNICATION CIRCUIT AND REQUEST SIGNAL CIRCUIT

- Turn ignition switch OFF.
- Disconnect AV control unit connector and satellite radio tuner connector.
- Check continuity between AV control unit harness connector and satellite radio tuner harness connector.

AV control unit		Satellite radio tuner		Continuity
Connector	Terminals	Connector	Terminals	
M82	28	B236	8	Existed
	29		9	
	30		10	

- Check continuity between AV control unit harness connector.

AV control unit		Ground	Continuity
Connector	Terminals		
M82	28	Ground	Not existed
	29		
	30		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

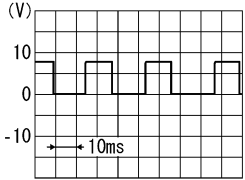
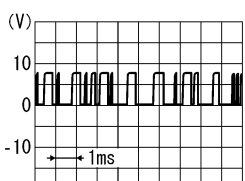
# U1255 SATELLITE RADIO TUNER

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## 3. CHECK AV CONTROL UNIT VOLTAGE

1. Connect AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between AV control unit harness connector and ground.

(+)		(-)	Reference value (Approx.)
AV control unit			
Connector	Terminals		
M82	28	Ground	 <p>SKIA9299J</p>
	29	Ground	 <p>SKIA9300J</p>

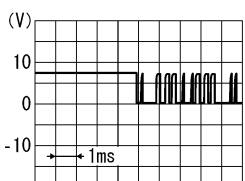
Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

## 4. CHECK SATELLITE RADIO TUNER

1. Turn ignition switch OFF.
2. Disconnect AV control unit connector.
3. Connect satellite radio tuner.
4. Turn ignition switch ON.
5. Check signal between satellite radio tuner harness connector and ground.

(+)		(-)	Reference value (Approx.)
Satellite radio tuner			
Connector	Terminal		
B236	10	Ground	 <p>SKIA9301J</p>

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace satellite radio tuner.

# U1300 AV COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## U1300 AV COMM CIRCUIT

### Description

INFOID:000000004371497

U1300 is indicated when malfunction occurs in communication signal of multi AV system. Indicated simultaneously, without fail, with the malfunction of control units connected to AV control unit with communication line. Determine the possible malfunction cause from the table below.

### SELF-DIAGNOSIS RESULTS DISPLAY ITEM

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1300 U1240	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>SWITCH CONN [U1240]</li> </ul>	<ul style="list-style-type: none"> <li>Multifunction switch power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in AV communication circuit between AV control unit and multifunction switch.</li> <li>Malfunction is detected in AV communication signal between AV control unit and multifunction switch.</li> </ul>	<ul style="list-style-type: none"> <li>Multifunction switch power supply and ground circuits.</li> <li>AV communication circuit between AV control unit and multifunction switch.</li> </ul>
U1300 U1252	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>REAR CAMERA LAN CONN [U1252]</li> </ul>	<ul style="list-style-type: none"> <li>Camera control unit power supply and ground circuits malfunction is detected.</li> <li>Malfunction is detected in AV communication circuit between multifunction switch and camera control unit.</li> <li>Malfunction is detected in AV communication signal between multifunction switch and camera control unit.</li> </ul>	<ul style="list-style-type: none"> <li>Camera control unit power supply and ground circuits.</li> <li>AV communication circuit between multifunction switch and camera control unit.</li> </ul>
U1300 U1240 U1252	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>SWITCH CONN [U1240]</li> <li>REAR CAMERA LAN CONN [U1252]</li> </ul>	<ul style="list-style-type: none"> <li>Malfunction is detected in AV communication circuit between AV control unit and multifunction switch.</li> <li>Malfunction is detected in AV communication signal between AV control unit and multifunction switch.</li> </ul>	AV communication circuit between AV control unit and multifunction switch.

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# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## POWER SUPPLY AND GROUND CIRCUIT

### AV CONTROL UNIT

#### AV CONTROL UNIT : Diagnosis Procedure

INFOID:000000005129845

#### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19
Ignition switch ON or START	3

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

#### 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between AV control unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	M81	19	OFF	Battery voltage
	M82	22		
		24		
ACC power supply	M81	7	ACC	Battery voltage
	M82	25		
Ignition signal	M85	104	ON	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between AV control unit and fuse.

#### 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect AV control unit connectors.
3. Check continuity between AV control unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M81	8	OFF	Existed
		17		
		20		
	M85	85		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## DISPLAY UNIT

#### DISPLAY UNIT : Diagnosis Procedure

INFOID:000000005129846

#### 1.CHECK POWER SUPPLY CIRCUIT (DISPLAY SIDE)

Check voltage between display unit harness connector and ground.



# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Inverter VCC	M71	2	ACC	9.0 V
Signal VCC		3		

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

## 2.CHECK POWER SUPPLY CIRCUIT (CONTINUITY)

1. Turn ignition switch OFF.
2. Disconnect the harness connector between display unit and AV control unit.
3. Check continuity between display unit harness connector M71 and AV control unit harness connector M83.

Signal name	Display unit (M71)	AV control unit (M83)	Continuity
Inverter VCC	2	59	Existed
Signal VCC	3	47	Existed

4. Check continuity between display unit harness connector M71 and ground.

Signal name	Display unit (M71)	—	Continuity
Inverter VCC	2	Ground	Not existed
Signal VCC	3	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

## 3.CHECK POWER SUPPLY CIRCUIT (AV CONTROL UNIT SIDE)

1. Connect the AV control unit harness connector.
2. Turn ignition switch ACC.
3. Check voltage between AV control unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Inverter VCC	M83	59	ACC	9 V
Signal VCC		47		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replacement of AV control unit.

## 4.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector.
3. Check continuity between display unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M71	1	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## MULTIFUNCTION SWITCH

### MULTIFUNCTION SWITCH : Diagnosis Procedure

INFOID:000000005129847

## 1.CHECK FUSE

Check for blown fuses.

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Power source	Fuse No.
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

## 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between multifunction switch harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
ACC power supply	M72	3	ACC	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between multifunction switch and fuse.

## 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect multifunction switch connector.
3. Check continuity between multifunction switch harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M72	1	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## CAMERA CONTROL UNIT

### CAMERA CONTROL UNIT : Diagnosis Procedure

INFOID:000000005129848

## 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

## 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between camera control unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	B241	32	OFF	Battery voltage
ACC power supply	B241	30	ACC	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between camera control unit and fuse.

## 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector.
3. Check continuity between camera control unit harness connector and ground.

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B241	31	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## SATELLITE RADIO TUNER

### SATELLITE RADIO TUNER : Diagnosis Procedure

INFOID:000000005129849

#### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

#### 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between satellite radio tuner harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	B236	12	OFF	Battery voltage
ACC power supply	B236	16	ACC	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between satellite radio tuner and fuse.

#### 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect satellite radio tuner.
3. Check continuity between satellite radio tuner harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B236	15	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

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# RGB (R: RED) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## RGB (R: RED) SIGNAL CIRCUIT

### Description

INFOID:000000005129850

Transmit the image displayed with AV control unit with RGB signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129851

#### 1. CHECK CONTINUITY RGB (R: RED) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	17	M83	40	Existed

4. Check continuity between display unit harness connector and ground.

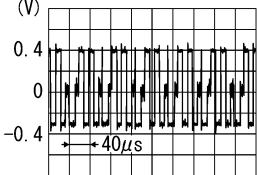
Display unit		Ground	Continuity
Connector	Terminal		
M71	17		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK RGB (R: RED) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	17	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2238J</p>

Is the inspection result normal?

- YES >> Replace display unit.  
 NO >> Replace AV control unit.

# RGB (G: GREEN) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## RGB (G: GREEN) SIGNAL CIRCUIT

### Description

INFOID:000000005129852

Transmit the image displayed with AV control unit with RGB signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129853

#### 1. CHECK CONTINUITY RGB (G: GREEN) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	6	M83	39	Existed

4. Check continuity between display unit harness connector and ground.

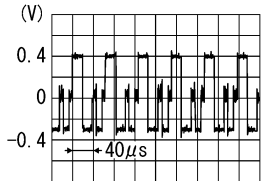
Display unit		Ground	Continuity
Connector	Terminal		
M71	6		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK RGB (G: GREEN) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	6	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2236J</p>

Is the inspection result normal?

- YES >> Replace display unit.  
 NO >> Replace AV control unit.

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# RGB (B: BLUE) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## RGB (B: BLUE) SIGNAL CIRCUIT

### Description

INFOID:000000005129854

Transmit the image displayed with AV control unit with RGB signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129855

#### 1. CHECK CONTINUITY RGB (B: BLUE) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	18	M83	38	Existed

4. Check continuity between display unit harness connector and ground.

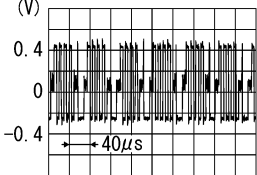
Display unit		Ground	Continuity
Connector	Terminal		
M71	18		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK RGB (B: BLUE) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	18	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 SKIB2237J

Is the inspection result normal?

- YES >> Replace display unit.  
NO >> Replace AV control unit.

# RGB SYNCHRONIZING SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## RGB SYNCHRONIZING SIGNAL CIRCUIT

### Description

INFOID:000000005129856

Transmit the RGB synchronizing signal to the display unit so as to synchronize the RGB image displayed with AV control unit.

### Diagnosis Procedure

INFOID:000000005129857

#### 1. CHECK CONTINUITY RGB SYNCHRONIZING SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	19	M83	41	Existed

4. Check continuity between display unit harness connector and ground.

Display unit		Ground	Continuity
Connector	Terminal		
M71	19		Not existed

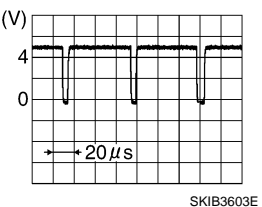
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK RGB SYNCHRONIZING SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Reference value
Display unit			
Connector	Terminal		
M71	19	Ground	

Is the inspection result normal?

YES >> Replace display unit.

NO >> Replace AV control unit.

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# RGB AREA (YS) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## RGB AREA (YS) SIGNAL CIRCUIT

### Description

INFOID:000000005129858

Transmits the display area of RGB image displayed by AV control unit with RGB area (YS) signal to display unit.

### Diagnosis Procedure

INFOID:000000005129859

#### 1. CHECK CONTINUITY RGB AREA (YS) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	9	M83	43	Existed

4. Check continuity between display unit harness connector and ground.

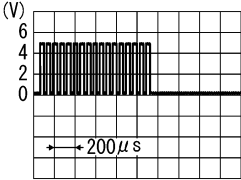
Display unit		Ground	Continuity
Connector	Terminal		
M71	9		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK RGB AREA (YS) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value (Approx.)
Connector	Terminal			
M71	9	Ground	At RGB image is displayed.	5.0 V
			At rear view camera image is displayed.	 <p style="text-align: right; font-size: small;">PKIB4948J</p>

Is the inspection result normal?

- YES >> Replace display unit.  
 NO >> Replace AV control unit.



# HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

### Description

INFOID:000000005129860

In composite image (AUX image, camera image), transmit the vertical synchronizing (VP) signal and horizontal synchronizing (HP) signal from display unit to AV control unit so as to synchronize the RGB images displayed with AV control unit such as the image quality adjusting menu, etc.

### Diagnosis Procedure

INFOID:000000005129861

#### 1. CHECK CONTINUITY HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	8	M83	45	Existed

4. Check continuity between display unit harness connector and ground.

Display unit		Ground	Continuity
Connector	Terminal		
M71	8		Not existed

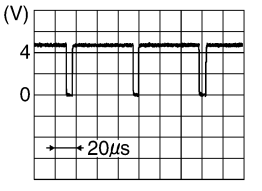
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK HORIZONTAL SYNCHRONIZING (HP) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+) Display unit		(-)	Reference value
Connector	Terminal		
M71	8	Ground	

Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace display unit.

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# VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

### Description

INFOID:000000005129862

In composite image (AUX image, camera image), transmit the vertical synchronizing (VP) signal and horizontal synchronizing (HP) signal from display unit to AV control unit so as to synchronize the RGB images displayed with AV control unit such as the image quality adjusting menu, etc.

### Diagnosis Procedure

INFOID:000000005129863

#### 1. CHECK CONTINUITY VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	20	M83	57	Existed

4. Check continuity between display unit harness connector and ground.

Display unit		Ground	Continuity
Connector	Terminal		
M71	20		Not existed

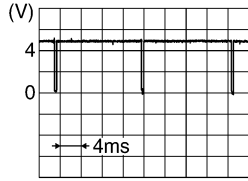
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK VERTICAL SYNCHRONIZING (VP) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Reference value
Display unit			
Connector	Terminal		
M71	20	Ground	 SKIB3598E

Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace display unit.

# AUX IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## AUX IMAGE SIGNAL CIRCUIT

### Description

INFOID:000000005129864

- Transmits the image signal of AUX device from auxiliary input jacks to AV control unit.
- AV control unit transmits the image signal that is inputted to the display unit.

### Diagnosis Procedure

INFOID:000000005129865

#### 1. CHECK CONTINUITY AUX IMAGE SIGNAL CIRCUIT (AUX INPUT JACKS AND AV CONTROL UNIT)

1. Turn ignition switch OFF.
2. Disconnect auxiliary input jacks connector and AV control unit connector.
3. Check continuity between auxiliary input jacks harness connector and AV control unit harness connector.

Auxiliary input jacks		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M154*1	7	M84	66	Existed
M362*2				

- \*1: A/T models
- \*2: M/T models

4. Check continuity between auxiliary input jacks harness connector and ground.

Auxiliary input jacks		Ground	Continuity
Connector	Terminal		
M154*1	7	Ground	Not existed
M362*2			

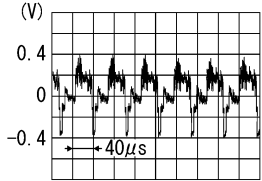
- \*1: A/T models
- \*2: M/T models

#### Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK AUX IMAGE SIGNAL (AUX INPUT JACKS TO AV CONTROL UNIT)

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between auxiliary input jacks harness connector and ground.

(+)		(-)	Condition	Reference value
Connector	Terminal			
M154*1	7	Ground	At AUX image displayed.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2251J</p>
M362*2				

- \*1: A/T models
- \*2: M/T models

#### Is the inspection result normal?

- YES >> INSPECTION END  
NO >> Check that there is no malfunction in the external device.

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# COMPOSITE IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## COMPOSITE IMAGE SIGNAL CIRCUIT

### Description

INFOID:000000005129866

AV control unit that inputs the camera image signal and AUX image signal transmits the composite image signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129867

#### 1. CHECK CONTINUITY COMPOSITE IMAGE SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect AV control unit connector and display unit connector.
3. Check continuity between AV control unit harness connector and display unit harness connector.

AV control unit		Display unit		Continuity
Connector	Terminals	Connector	Terminals	
M83	36	M71	15	Existed
	37		4	

4. Check continuity between display unit harness connector and ground.

Display unit		Ground	Continuity
Connector	Terminal		
M71	15		Not existed

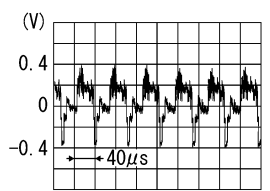
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK COMPOSITE IMAGE SIGNAL

1. Connect AV control unit connector and display unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector using an oscilloscope.

(+) Display unit		(-)	Condition	Signal
Connector	Terminal			
M71	15	Ground	When camera image is displayed.	 <p>(V) 0.4 0 -0.4 40µs</p> <p>SKIB2251J</p>

Is the inspection result normal?

YES >> Replace display unit.

NO >> Replace AV control unit.

# CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)

### Description

INFOID:000000005129870

- Camera control unit outputs camera power supply to rear view camera and inputs rear view camera image signal from rear view camera when the reverse signal is input.
- The camera control unit that inputs the camera image signal transmits the camera image signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129871

#### 1. CHECK CONTINUITY CAMERA POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and rear view camera connector.
3. Check continuity between camera control unit harness connector and rear view camera harness connector.

Camera control unit		Rear view camera		Continuity
Connector	Terminal	Connector	Terminal	
B241	8	B311	1	Existed

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminal		
B241	8		Not existed

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK VOLTAGE CAMERA POWER SUPPLY

1. Connect camera control unit connector and rear view camera connector.
2. Turn ignition switch ON.
3. Shift position is "R".
4. Check voltage between camera control unit harness connector and ground.

(+)		(-)	Condition	Voltage (Approx.)
Camera control unit Connector	Terminal			
B241	8	Ground	Shift position is "R".	6.0 V

Is inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

#### 3. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and rear view camera connector.
3. Check continuity between camera control unit harness connector and rear view camera harness connector.

Camera control unit		Rear view camera		Continuity
Connector	Terminal	Connector	Terminal	
B241	6	B311	3	Existed

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# CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminal		
B241	6		Not existed

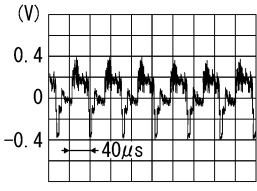
Is inspection result normal?

YES >> GO TO 4.

NO >> Repair harness or connector.

## 4. CHECK CAMERA IMAGE SIGNAL

1. Connect camera control unit connector and rear view camera connector.
2. Turn ignition switch ON.
3. Shift position is "R".
4. Check signal between camera control unit harness connector and ground.

(+)		(-)	Condition	Reference value
Camera control unit				
Connector	Terminal			
B241	6	Ground	At rear view camera image is displayed.	

Is inspection result normal?

YES >> Replace camera control unit.

NO >> Replace rear view camera.

# CAMERA IMAGE SIGNAL CIRCUIT (CAMERA CONTROL UNIT TO AV CONTROL UNIT)

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## CAMERA IMAGE SIGNAL CIRCUIT (CAMERA CONTROL UNIT TO AV CONTROL UNIT)

### Description

INFOID:000000005129872

- Camera control unit outputs camera power supply to rear view camera and inputs rear view camera image signal from rear view camera when the reverse signal is input.
- The camera control unit that inputs the camera image signal transmits the camera image signal to the AV control unit.

### Diagnosis Procedure

INFOID:000000005129873

#### 1. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and AV control unit connector.
3. Check continuity between camera control unit harness connector and AV control unit harness connector.

Camera control unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
B241	12	M84	65	Existed
	11		64	

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminal		
B241	12		Not existed

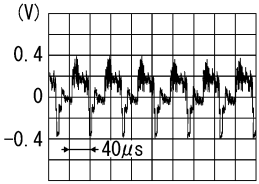
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK CAMERA IMAGE SIGNAL

1. Connect camera control unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between camera control unit harness connector and ground using an oscilloscope.

(+)		(-)	Condition	Signal
Camera control unit				
Connector	Terminal			
B241	12	Ground	Shift the selector lever to "R" position.	 <p style="text-align: right; font-size: small;">SKIB2251J</p>

Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace camera control unit.

# DISK EJECT SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## DISK EJECT SIGNAL CIRCUIT

### Description

INFOID:000000005129868

The eject signal is output to AV control unit when the eject switch of multifunction switch is pressed.

### Diagnosis Procedure

INFOID:000000005129869

#### 1. CHECK CONTINUITY CD EJECT SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect multifunction switch connector and AV control unit connector.
3. Check continuity between multifunction switch harness connector and AV control unit harness connector.

Multifunction switch		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M72	14	M85	103	Existed

4. Check continuity between multifunction switch harness connector and ground.

Multifunction switch		Ground	Continuity
Connector	Terminal		
M72	14		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK AV CONTROL UNIT VOLTAGE

1. Connect multifunction switch connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit harness connector and ground.

(+)		(-)	Condition	Voltage (Approx.)
AV control unit				
Connector	Terminal			
M85	103	Ground	Pressing the eject switch	0 V
			Except for above	3.3 V

Is the inspection result normal?

- YES >> Replace preset switch.  
NO >> Replace AV control unit.



# COMMUNICATION SIGNAL CIRCUIT (CONT-SAT)

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## COMMUNICATION SIGNAL CIRCUIT (CONT-SAT)

### Description

INFOID:000000005129874

Satellite radio tuner and AV control unit are connected with a serial communication. They transmit the operation signal from AV control unit to satellite radio tuner, and transmit the display signal from satellite radio tuner to AV control unit.

### Diagnosis Procedure

INFOID:000000005129875

#### 1. CHECK CONTINUITY COMMUNICATION SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect satellite radio tuner connector and AV control unit connector.
3. Check continuity between satellite radio tuner harness connector and AV control unit harness connector.

Satellite radio tuner		AV control unit		Continuity
Connector	Terminals	Connector	Terminals	
B236	9	M82	29	Existed
	10		30	

4. Check continuity between satellite radio tuner harness connector and ground.

Satellite radio tuner		Ground	Continuity
Connector	Terminals		
B236	9		Not existed
	10		

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK COMMUNICATION SIGNAL

1. Connect satellite radio tuner connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between satellite radio tuner harness connector and ground.

(+)		(-)	Condition	Reference value
Connector	Terminal			
B236	9	Ground	When satellite radio mode is selected.	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace satellite radio tuner.

#### 3. CHECK COMMUNICATION SIGNAL

Check signal between satellite radio tuner harness connector and ground.

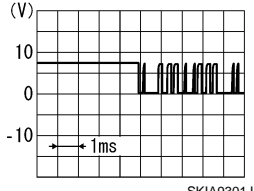
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# COMMUNICATION SIGNAL CIRCUIT (CONT-SAT)

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

(+)		(-)	Condition	Reference value
Satellite radio tuner				
Connector	Terminal			
B236	10	Ground	When satellite radio mode is selected.	

Is the inspection result normal?

- YES >> Replace satellite radio tuner.
- NO >> Replace AV control unit.

# REQUEST SIGNAL CIRCUIT (SAT→CONT)

[BASE AUDIO WITHOUT NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

## REQUEST SIGNAL CIRCUIT (SAT→CONT)

### Description

INFOID:000000005129876

Request signal transmits the signal to recognize the connection of satellite radio tuner from satellite radio tuner to AV control unit.

### Diagnosis Procedure

INFOID:000000005129877

#### 1. CHECK CONTINUITY REQUEST SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect satellite radio tuner connector and AV control unit connector.
3. Check continuity between satellite radio tuner harness connector and AV control unit harness connector.

Satellite radio tuner		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
B236	8	M82	28	Existed

4. Check continuity between satellite radio tuner harness connector and ground.

Satellite radio tuner		Ground	Continuity
Connector	Terminal		
B236	8		Not existed

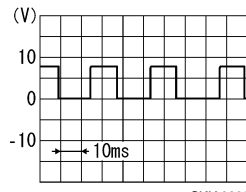
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK COMMUNICATION SIGNAL

1. Connect satellite radio tuner connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between satellite radio tuner harness connector and ground.

(+)		(-)	Condition	Reference value
Connector	Terminal			
B236	8	Ground	When satellite radio mode is selected.	

Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace satellite radio tuner.

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# STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT

### Description

INFOID:000000005173877

- Steering angle sensor signal 1, 2 detects the turning direction and quantity of the steering and transmits it to the camera control unit.
- Steering angle sensor signal 3 detects the neutral position of the steering and transmits it to the camera control unit.
- Camera control unit performs the correction of neutral position with sensor signal 1, 2, 3 and vehicle speed signal.

### Diagnosis Procedure

INFOID:000000005173878

#### 1. CHECK CONTINUITY STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and steering angle sensor connector.
3. Check continuity between camera control unit harness connector and steering angle sensor harness connector.

Camera control unit		Steering angle sensor		Continuity
Connector	Terminals	Connector	Terminals	
B241	23	M37	3	Existed
	24		4	

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminals		
B241	23		Not existed
	24		

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK SENSOR SIGNAL 1, 2

1. Connect camera control unit connector.
2. Turn ignition switch ON.
3. Check voltage between camera control unit harness connector and ground.

(+) Camera control unit		(-)	Voltage (Approx.)
Connector	Terminals		
B241	23	Ground	5.0 V
	24		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

#### 3. CHECK SENSOR SIGNAL 1, 2

1. Connect steering angle sensor connector.
2. Check signal between camera control unit harness connector and ground.

# STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

(+)		(-)	Condition	Reference value
Camera control unit				
Connector	Terminals			
B241	23, 24	Ground	Turn the steering to the right	<p>SKIB3827E</p> <p>A: Sensor signal 1 B: Sensor signal 2</p>
			Turn the steering to the left	<p>SKIB3828E</p> <p>A: Sensor signal 1 B: Sensor signal 2</p>

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering angle sensor.

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# STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT

### Description

INFOID:000000005173879

- Steering angle sensor signal 1, 2 detects the turning direction and quantity of the steering and transmits it to the camera control unit.
- Steering angle sensor signal 3 detects the neutral position of the steering and transmits it to the camera control unit.
- Camera control unit performs the correction of neutral position with sensor signal 1, 2, 3 and vehicle speed signal.

### Diagnosis Procedure

INFOID:000000005173880

#### 1. CHECK CONTINUITY STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and steering angle sensor connector.
3. Check continuity between camera control unit harness connector and steering angle sensor harness connector.

Camera control unit		Steering angle sensor		Continuity
Connector	Terminals	Connector	Terminals	
B241	25	M37	5	Existed

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminals		
B241	25		Not existed

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK SENSOR SIGNAL 3

1. Connect camera control unit connector.
2. Turn ignition switch ON.
3. Check voltage between camera control unit harness connector and ground.

(+)		(-)	Voltage (Approx.)
Camera control unit			
Connector	Terminals		
B241	25	Ground	5.0 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

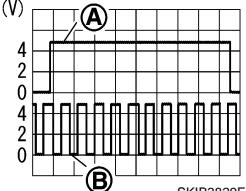
#### 3. CHECK SENSOR SIGNAL 3

1. Connect steering angle sensor connector.
2. Check signal between camera control unit harness connector and ground.

# STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

(+)		(-)	Condition	Reference value
Camera control unit				
Connector	Terminals			
B241	25	Ground	Turn the steering around the neutral position	 <p>SKIB3829E A: Sensor signal 3 B: Sensor signal 1</p>

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering angle sensor.

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# STEERING SWITCH SIGNAL A CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## STEERING SWITCH SIGNAL A CIRCUIT

### Description

INFOID:000000005129878

Transmits the steering switch signal to AV control unit.

### Diagnosis Procedure

INFOID:000000005129879

#### 1.CHECK STEERING SWITCH SIGNAL A CIRCUIT

1. Disconnect AV control unit connector and spiral cable connector.
2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M81	6	M36	24	Existed

3. Check continuity between AV control unit harness connector and ground.

AV control unit		Ground	Continuity
Connector	Terminal		
M81	6		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2.CHECK SPIRAL CABLE

Check spiral cable.

Is the inspection result normal?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3.CHECK AV CONTROL UNIT VOLTAGE

1. Connect AV control unit connector and spiral cable connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit harness connector.

(+)		(-)		Voltage (Approx.)
AV control unit		AV control unit		
Connector	Terminal	Connector	Terminal	
M81	6	M81	15	3.3 V

Is the inspection result normal?

- YES >> GO TO 4.  
NO >> Replace AV control unit.

#### 4.CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-72, "Component Inspection"](#).

Is the inspection result normal?

- YES >> INSPECTION END  
NO >> Replace steering switch.

### Component Inspection

INFOID:000000005129880

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.



# STEERING SWITCH SIGNAL A CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Standard

**Between terminals 14 and 17**

**MENU DOWN switch ON : Approx. 318 – 324  $\Omega$**

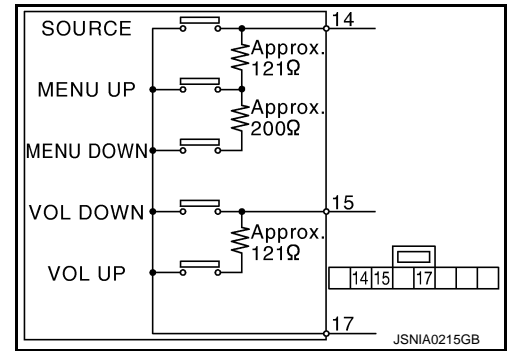
**MENU UP switch ON : Approx. 120 – 122  $\Omega$**

**SOURCE switch ON : Approx. 0  $\Omega$**

**Between terminals 15 and 17**

**VOL UP switch ON : Approx. 120 – 122  $\Omega$**

**VOL DOWN switch ON : Approx. 0  $\Omega$**



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# STEERING SWITCH SIGNAL B CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## STEERING SWITCH SIGNAL B CIRCUIT

### Description

INFOID:000000005129887

Transmits the steering switch signal to AV control unit.

### Diagnosis Procedure

INFOID:000000005129882

#### 1. CHECK STEERING SWITCH SIGNAL B CIRCUIT

1. Disconnect AV control unit connector and spiral cable connector.
2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M81	16	M36	31	Existed

3. Check continuity between AV control unit harness connector and ground.

AV control unit		Ground	Continuity
Connector	Terminal		
M81	16		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK SPIRAL CABLE

Check spiral cable.

Is the inspection result normal?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3. CHECK AV CONTROL UNIT VOLTAGE

1. Connect AV control unit connector and spiral cable connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit harness connector.

(+)		(-)		Voltage (Approx.)
AV control unit		AV control unit		
Connector	Terminal	Connector	Terminal	
M81	16	M81	15	3.3 V

Is the inspection result normal?

- YES >> GO TO 4.  
NO >> Replace AV control unit.

#### 4. CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-74, "Component Inspection"](#).

Is the inspection result normal?

- YES >> INSPECTION END  
NO >> Replace steering switch.

### Component Inspection

INFOID:000000005129888

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.

# STEERING SWITCH SIGNAL B CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Standard

**Between terminals 14 and 17**

**MENU DOWN switch ON : Approx. 318 – 324 Ω**

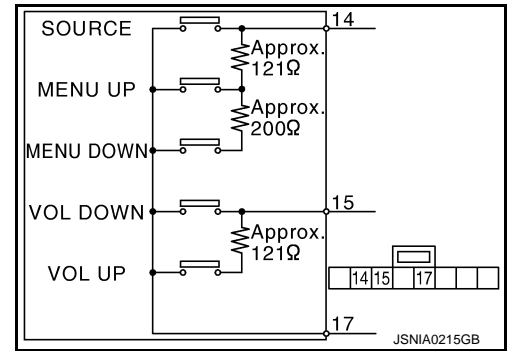
**MENU UP switch ON : Approx. 120 – 122 Ω**

**SOURCE switch ON : Approx. 0 Ω**

**Between terminals 15 and 17**

**VOL UP switch ON : Approx. 120 – 122 Ω**

**VOL DOWN switch ON : Approx. 0 Ω**



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# STEERING SWITCH SIGNAL GND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## STEERING SWITCH SIGNAL GND CIRCUIT

### Description

INFOID:000000005129889

Transmits the steering switch signal to AV control unit.

### Diagnosis Procedure

INFOID:000000005129885

#### 1.CHECK STEERING SWITCH SIGNAL GND CIRCUIT

1. Disconnect AV control unit connector and spiral cable connector.
2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M81	15	M36	33	Existed

3. Connect AV control unit connector.

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2.CHECK SPIRAL CABLE

Check spiral cable.

Is the inspection result normal?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3.CHECK GROUND CIRCUIT

1. Connect AV control unit connector.
2. Check continuity between AV control unit harness connector and ground.

AV control unit		Ground	Continuity
Connector	Terminal		
M81	15		Not existed

Is the inspection result normal?

- YES >> GO TO 4.  
NO >> Replace AV control unit.

#### 4.CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-76, "Component Inspection"](#).

Is the inspection result normal?

- YES >> INSPECTION END  
NO >> Replace steering switch.

### Component Inspection

INFOID:000000005129890

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.

# STEERING SWITCH SIGNAL GND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Standard

Between terminals 14 and 17

MENU DOWN switch ON : Approx. 318 – 324 Ω

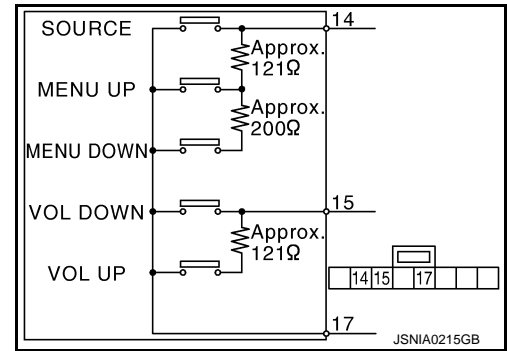
MENU UP switch ON : Approx. 120 – 122 Ω

SOURCE switch ON : Approx. 0 Ω

Between terminals 15 and 17

VOL UP switch ON : Approx. 120 – 122 Ω

VOL DOWN switch ON : Approx. 0 Ω



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# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## ECU DIAGNOSIS INFORMATION

### AV CONTROL UNIT

#### Reference Value

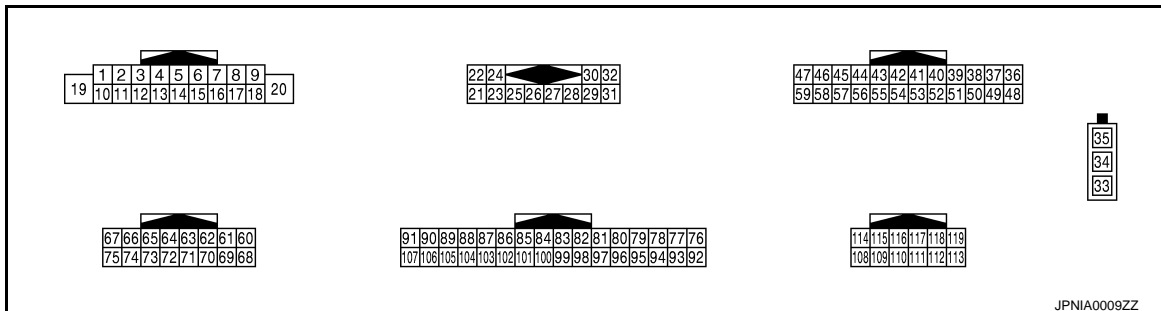
INFOID:000000005129181

#### VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition		Value/Status
VHCL SPD SIG	Ignition switch ON	Vehicle speed > 0 km/h (0 MPH)	On
		Vehicle speed = 0 km/h (0 MPH)	Off
PKB SIG	Ignition switch ON	Parking brake is applied.	On
		Parking brake is released.	Off
ILLUM SIG	Ignition switch ON	Light switch ON	On
		Light switch OFF	Off
IGN SIG	Ignition switch ON	—	On
	Ignition switch ACC	—	Off
REV SIG	Ignition switch ON	Selector lever in R position	On
		Selector lever in any position other than R	Off

#### TERMINAL LAYOUT



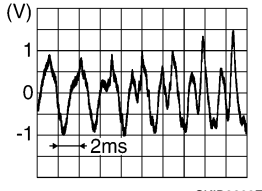
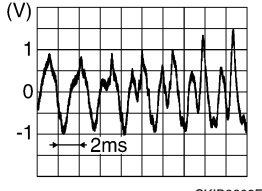
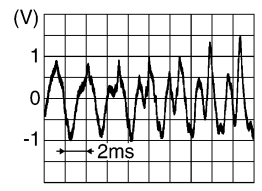
#### PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
2 (L)	3 (W)	Sound signal front door LH	Output	Ignition switch ON	Sound output	<p>SKIB3609E</p>
4 (LG)	5 (SB)	Sound signal rear LH	Output	Ignition switch ON	Sound output	<p>SKIB3609E</p>

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition	Reference value (Approx.)	
+	-	Signal name	Input/ Output			
6 (P)	15 (B)	Steering switch signal A	Input	Ignition switch ON	Keep pressing SOURCE switch.	0 V
					Keep pressing $\Delta$ switch.	0.7 V
					Keep pressing $\nabla$ switch.	1.3 V
					Except for above.	3.3 V
7 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
8 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
9 (L)	Ground	Illumination signal	Input	OFF	Lighting switch is OFF.	0 V
					Lighting switch is ON.	12.0 V
11 (BR)	12 (SB)	Sound signal front door RH	Output	Ignition switch ON	Sound output	 <small>SKIB3609E</small>
13 (L)	14 (P)	Sound signal rear RH	Output	Ignition switch ON	Sound output	 <small>SKIB3609E</small>
16 (L)	15 (B)	Steering switch signal B	Input	Ignition switch ON	Keep pressing VOL DOWN switch.	0 V
					Keep pressing VOL UP switch.	0.7 V
					Except for above.	3.3 V
17 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
19 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
20 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
22 (B)	21 (W)	Satellite radio sound signal LH	Input	Ignition switch ON	When satellite radio mode is selected.	 <small>SKIB3609E</small>

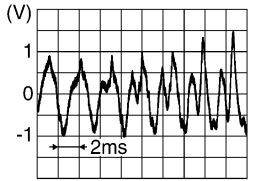
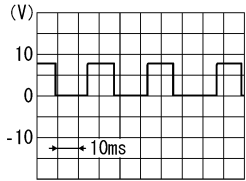
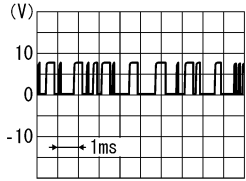
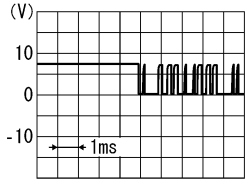
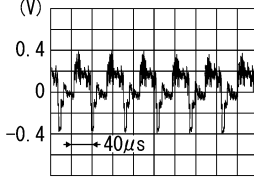
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AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

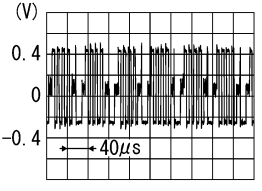
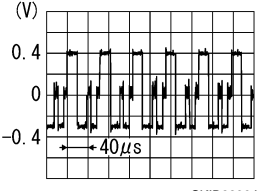
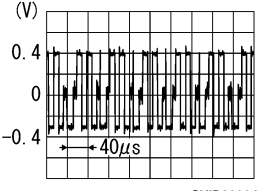
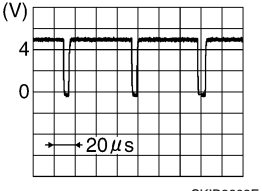
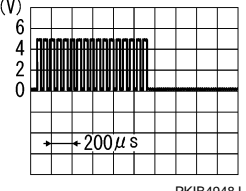
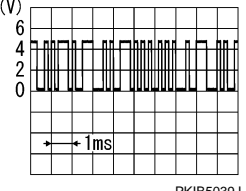
Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
24 (G)	23 (R)	Satellite radio sound signal RH	Input	Ignition switch ON	When satellite radio mode is selected.	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
25	—	Shield	—	—	—	—
26	—	Shield	—	—	—	—
28 (P)	Ground	Request signal (SAT→CONT)	Input	Ignition switch ON	When satellite radio mode is selected.	 <p style="text-align: right; font-size: small;">SKIA9299J</p>
29 (G)	Ground	Communication signal (SAT→CONT)	Input	Ignition switch ON	When satellite radio mode is selected.	 <p style="text-align: right; font-size: small;">SKIA9300J</p>
30 (L)	Ground	Communication signal (CONT→SAT)	Output	Ignition switch ON	When satellite radio mode is selected.	 <p style="text-align: right; font-size: small;">SKIA9301J</p>
34	—	AM-FM main	Input	—	—	—
35	Ground	Antenna amp. ON signal	Output	Ignition switch ACC	—	12.0 V
36 (SB)	Ground	Composite image signal	Output	Ignition switch ON	At camera image is dis- played.	 <p style="text-align: right; font-size: small;">SKIB2251J</p>
37 (V)	Ground	Composite image ground	—	Ignition switch ON	—	0 V



# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
38 (P)	Ground	RGB signal (B: blue)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p style="text-align: right; font-size: small;">SKIB2237J</p>
39 (L)	Ground	RGB signal (G: green)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p style="text-align: right; font-size: small;">SKIB2236J</p>
40 (G)	Ground	RGB signal (R: red)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p style="text-align: right; font-size: small;">SKIB2238J</p>
41 (W)	Ground	RGB synchronizing signal	Output	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIB3603E</p>
42	—	Shield	—	—	—	—
43 (B)	Ground	RGB area (YS) signal	Output	Ignition switch ON	At RGB image is displayed.	5.0 V
					At AUX image is displayed.	 <p style="text-align: right; font-size: small;">PKIB4948J</p>
44 (L)	Ground	Communication signal (DISP→CONT)	Input	Ignition switch ON	When adjusting display brightness.	 <p style="text-align: right; font-size: small;">PKIB5039J</p>

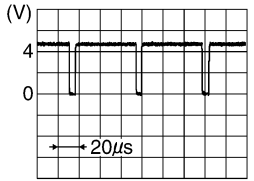
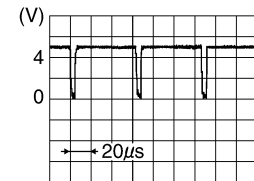
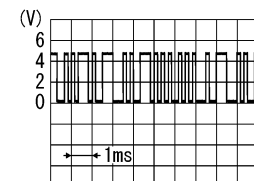
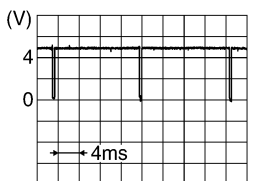
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AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

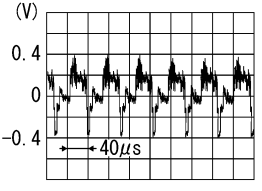
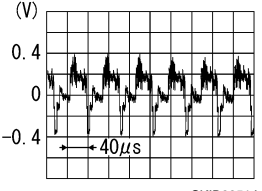
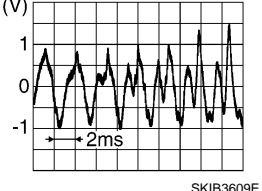
[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
45 (R)	Ground	Horizontal synchronizing (HP) signal	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIB3601E</p>
46 (LG)	Ground	Signal ground	—	Ignition switch ON	—	0 V
47 (O)	Ground	Signal VCC	Output	Ignition switch ACC	—	9.0 V
48 (BR)	Ground	Composite synchronizing signal	Output	Ignition switch ON	When camera image is dis- played.	 <p style="text-align: right; font-size: small;">SKIB0825E</p>
49 (Y)	—	Shield	—	—	—	—
50	—	Shield	—	—	—	—
55	—	Shield	—	—	—	—
56 (P)	Ground	Communication signal (CONT→DISP)	Output	Ignition switch ON	When adjusting display brightness.	 <p style="text-align: right; font-size: small;">PKIB5039J</p>
57 (G)	Ground	Vertical synchronizing (VP) signal	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIB3598E</p>
58 (BR)	Ground	Inverter ground	—	Ignition switch ON	—	0 V
59 (Y)	Ground	Inverter VCC	Output	Ignition switch ACC	—	9.0 V
64	—	Shield	—	—	—	—

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

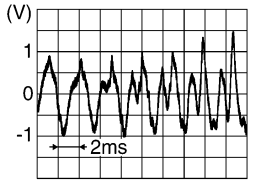
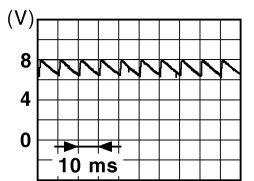
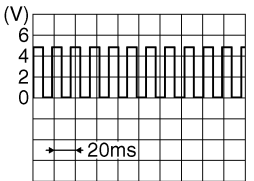
Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
65 (W)	Ground	Camera image signal	Input	Ignition switch ON	At camera image is displayed.	 <p style="text-align: right; font-size: small;">SKIB2251J</p>
66 (G)	Ground	AUX image signal	Input	Ignition switch ON	At AUX image is displayed.	 <p style="text-align: right; font-size: small;">SKIB2251J</p>
68 (GR)	Ground	Camera connection recognition signal	Input	Ignition switch ON	Connected to camera control unit connector.	0 V
					Not connected to camera control unit connector.	5.0 V
73 (B)	—	Shield	—	—	—	—
74 (R)	Ground	AUX image signal ground	—	Ignition switch ON	—	0 V
85 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
86 (L)	—	CAN-H	Input/ Output	—	—	—
87 (P)	—	CAN-L	Input/ Output	—	—	—
88 (L)	—	AV communication signal (H)	Input/ Output	—	—	—
89 (P)	—	AV communication signal (L)	Input/ Output	—	—	—
90 (V)	—	AV communication signal (H)	Input/ Output	—	—	—
91 (LG)	—	AV communication signal (L)	Input/ Output	—	—	—
95 (R)	Ground	AUX sound signal RH	Input	Ignition switch ON	When AUX mode is selected.	 <p style="text-align: right; font-size: small;">SKIB3609E</p>

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# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
96 (W)	Ground	AUX sound signal LH	Input	Ignition switch ON	When AUX mode is select- ed.	 <small>SKIB3609E</small>
97 (B)	Ground	AUX sound signal ground	—	Ignition switch ON	—	0 V
101 (BR)	Ground	Switch ground	—	Ignition switch ON	—	0 V
103 (SB)	Ground	Disk eject signal	Input	—	Pressing the eject switch.	0 V
					Except for above	3.3 V
104 (G)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
105 (O)	Ground	Reverse signal	Input	Ignition switch ON	R position	12.0 V
					Other than R position	0 V
106 (SB)	Ground	Parking brake signal	Input	Ignition switch ON	Parking brake ON	0 V
					Parking brake OFF	 <small>JSNIA0007GB</small>
107 (GR)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is ap- prox. 40 km/h (25 MPH)	<p><b>NOTE:</b> Maximum voltage may be 12.0 V due to specifications (connected units).</p>  <small>SKIA6649J</small>

## Wiring Diagram - BASE AUDIO WITHOUT NAVIGATION SYSTEM -

INFOID:000000004371534

**NOTE:**

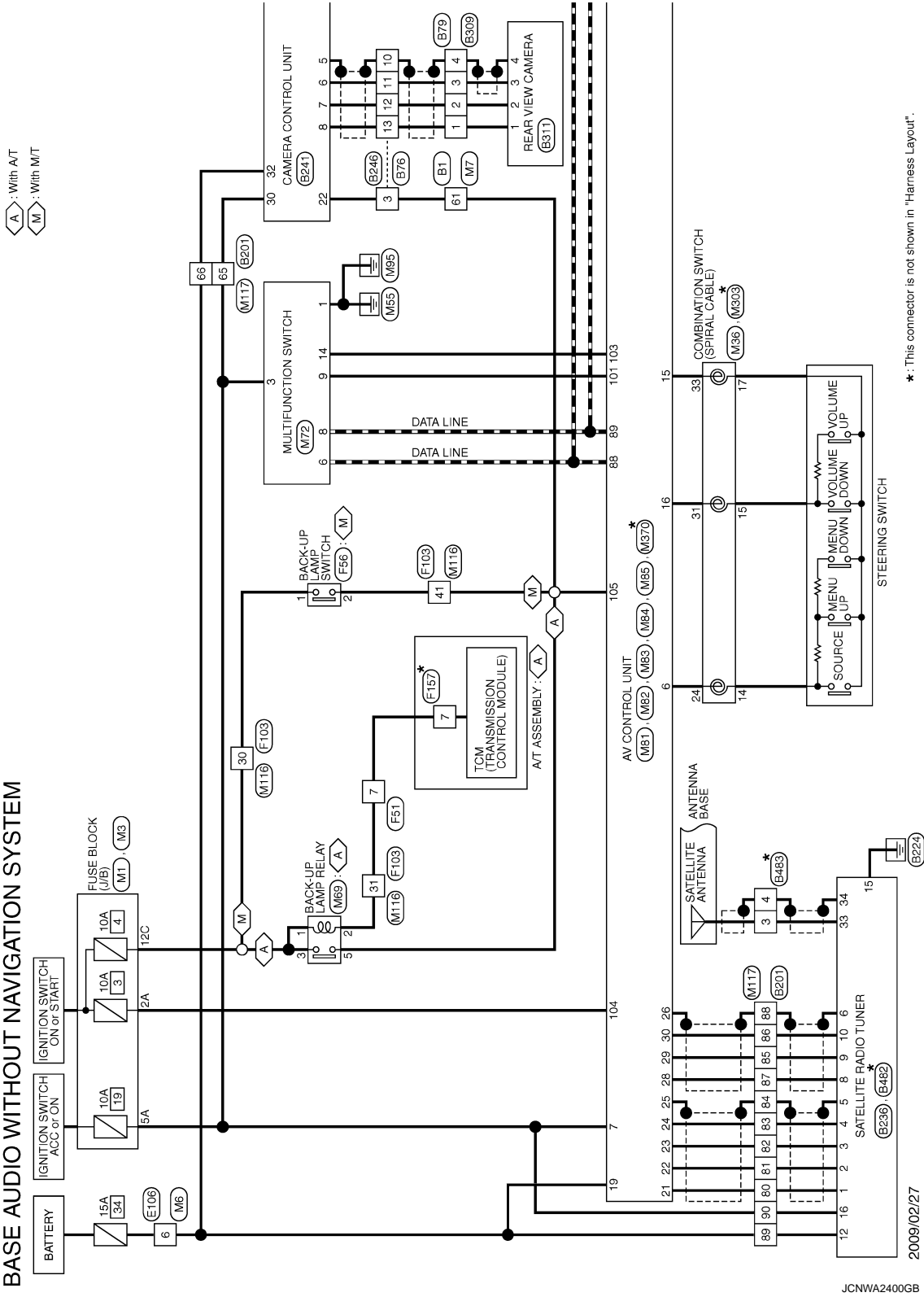
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

## BASE AUDIO WITHOUT NAVIGATION SYSTEM



\*: This connector is not shown in "Harness Layout".

2009/02/27

JCNWA2400GB

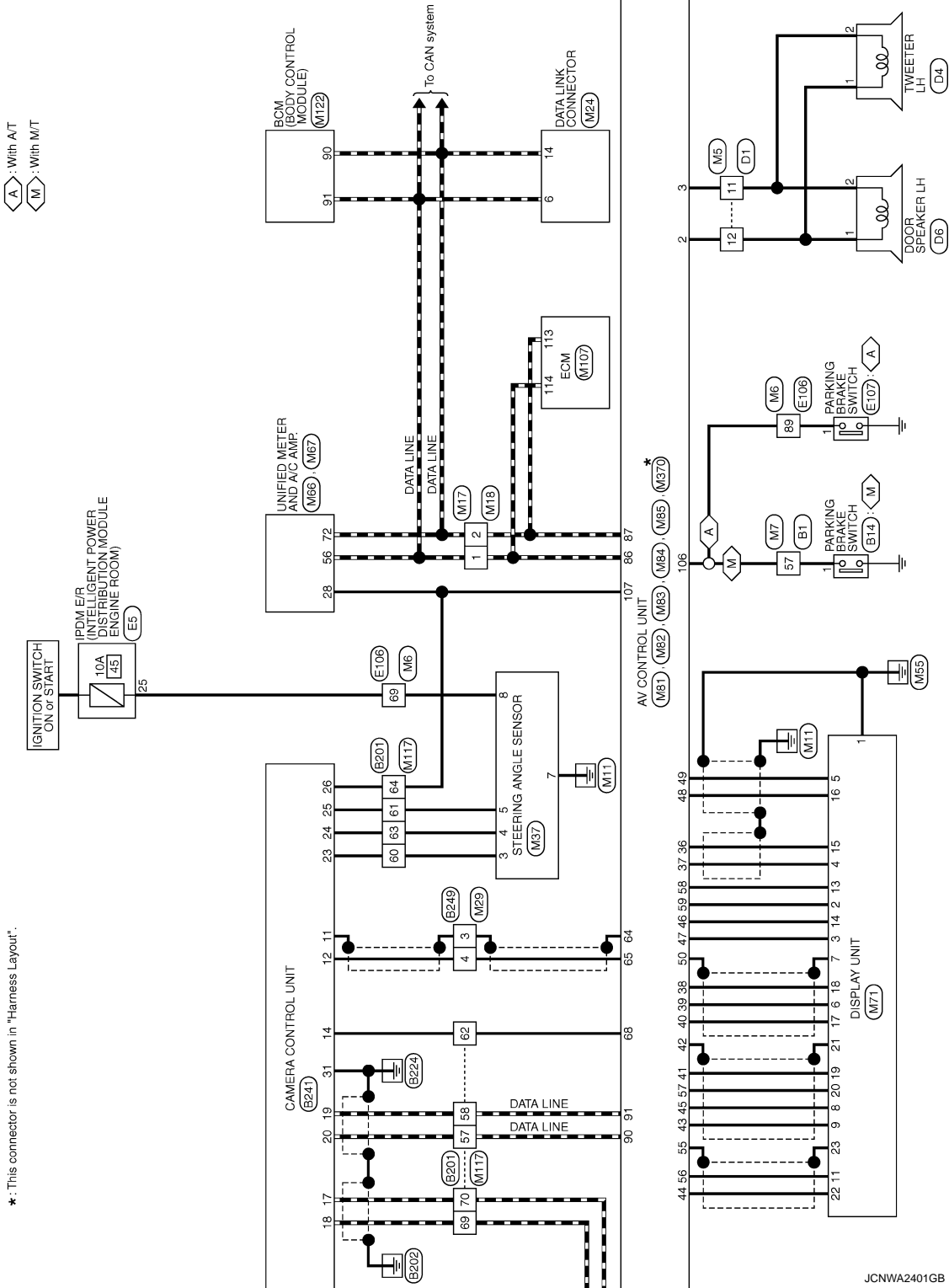
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AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]



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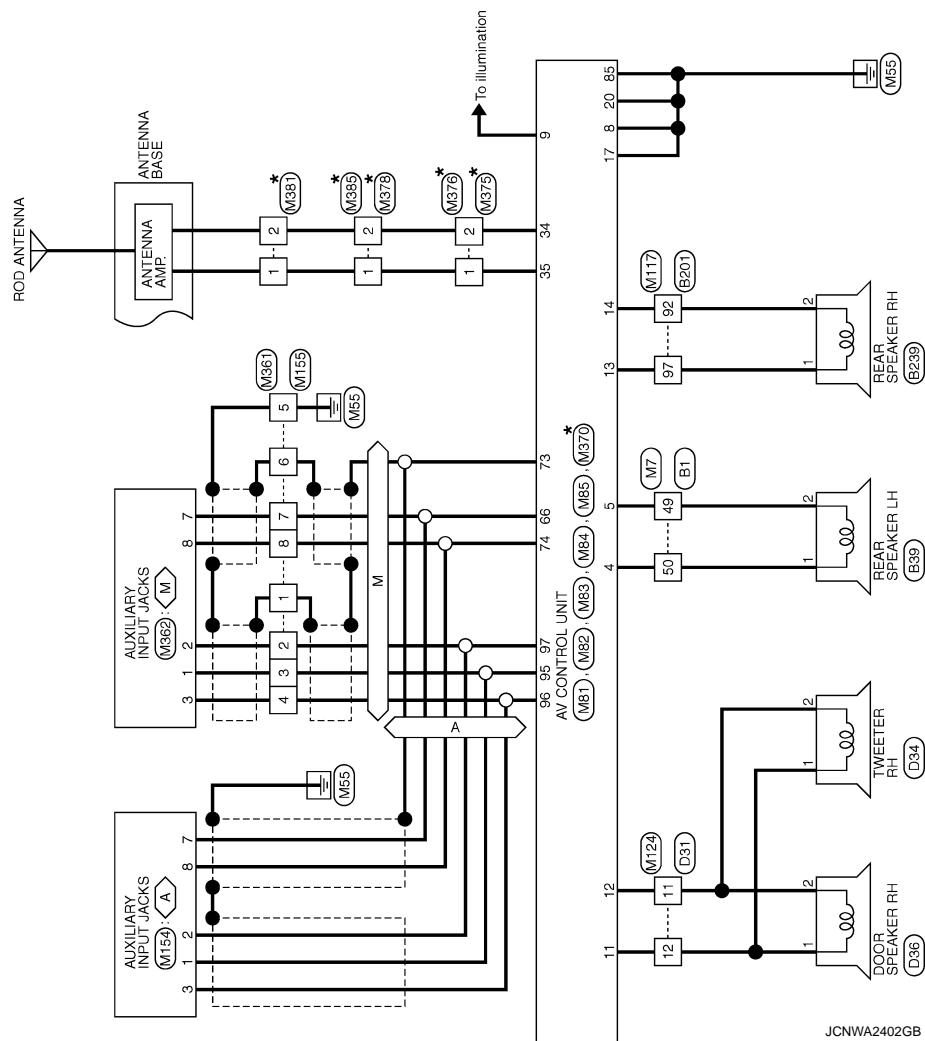
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

A : With A/T  
M : With M/T

\*: This connector is not shown in "Harness Layout".



JCNWA2402GB

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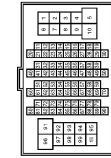
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
48	Y	- [Without BOSE system]
50	LG	- [Without BOSE system]
57	V	-
61	O	-

Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	P01EB-A



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

Connector No.	B39
Connector Name	REAR SPEAKER LH
Connector Type	NS30ZFW-CS



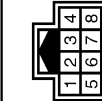
Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	Y	-

Connector No.	B76
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



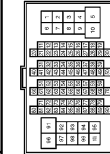
Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	SHIELD	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
57	G	-
58	R	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	V	-
65	SB	-
66	Y	-
68	L	-
70	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
80	G	-
81	R	-
82	W	-
83	B	-
84	SHIELD	-
85	O	-
86	BR	-
87	Y	-
88	SHIELD	-
89	SB	-
90	V	-
92	Y	- [Without BOSE system]
97	LG	- [Without BOSE system]

JCNWA2403GB



# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B236
Connector Name	SATELLITE RADIO TUNER
Connector Type	TA16FW



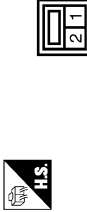
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	Y	REQUEST (SAT->CONT)
9	O	COMM (SAT->CONT)
10	BR	COMM (CONT->SAT)
12	SB	BATTERY
15	B	GND

Connector No.	B241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH22FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (R)
19	R	AV COMM (L)
20	G	AV COMM (R)

Connector No.	B249
Connector Name	REAR SPEAKER RH
Connector Type	NS22FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	
2	Y	

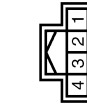
Connector No.	B246
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	
10	SHIELD	
11	B	
12	W	
13	R	

22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	O	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (8-PULSE)
30	SB	ACC
31	B	GND
32	Y	BATTERY

Connector No.	B249
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	
4	W	

JCNWA2404GB

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P


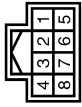







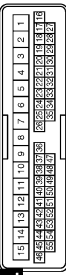





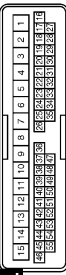
AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>B309</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40PW-NH</td></tr> </table>  	Connector No.	B309	Connector Name	WIRE TO WIRE	Connector Type	TH40PW-NH	<table border="1"> <tr><td>Terminal No.</td><td>Color of Wire</td><td>Signal Name [Specification]</td></tr> <tr><td>1</td><td>R</td><td>—</td></tr> <tr><td>2</td><td>W</td><td>—</td></tr> <tr><td>3</td><td>Y</td><td>—</td></tr> <tr><td>4</td><td>SHIELD</td><td>—</td></tr> </table>	Terminal No.	Color of Wire	Signal Name [Specification]	1	R	—	2	W	—	3	Y	—	4	SHIELD	—
Connector No.	B309																					
Connector Name	WIRE TO WIRE																					
Connector Type	TH40PW-NH																					
Terminal No.	Color of Wire	Signal Name [Specification]																				
1	R	—																				
2	W	—																				
3	Y	—																				
4	SHIELD	—																				
<table border="1"> <tr><td>Connector No.</td><td>B311</td></tr> <tr><td>Connector Name</td><td>REAR VIEW CAMERA</td></tr> <tr><td>Connector Type</td><td>TH40MW-NH</td></tr> </table>  	Connector No.	B311	Connector Name	REAR VIEW CAMERA	Connector Type	TH40MW-NH	<table border="1"> <tr><td>Terminal No.</td><td>Color of Wire</td><td>Signal Name [Specification]</td></tr> <tr><td>1</td><td>R</td><td>CAMERA ON SIGNAL</td></tr> <tr><td>2</td><td>W</td><td>GND</td></tr> <tr><td>3</td><td>Y</td><td>CAMERA IMAGE SIGNAL</td></tr> <tr><td>4</td><td>SHIELD</td><td>SHIELD</td></tr> </table>	Terminal No.	Color of Wire	Signal Name [Specification]	1	R	CAMERA ON SIGNAL	2	W	GND	3	Y	CAMERA IMAGE SIGNAL	4	SHIELD	SHIELD
Connector No.	B311																					
Connector Name	REAR VIEW CAMERA																					
Connector Type	TH40MW-NH																					
Terminal No.	Color of Wire	Signal Name [Specification]																				
1	R	CAMERA ON SIGNAL																				
2	W	GND																				
3	Y	CAMERA IMAGE SIGNAL																				
4	SHIELD	SHIELD																				
<table border="1"> <tr><td>Connector No.</td><td>B482</td></tr> <tr><td>Connector Name</td><td>SATELLITE RADIO TUNER</td></tr> <tr><td>Connector Type</td><td>FAKRA</td></tr> </table>  	Connector No.	B482	Connector Name	SATELLITE RADIO TUNER	Connector Type	FAKRA	<table border="1"> <tr><td>Terminal No.</td><td>Color of Wire</td><td>Signal Name [Specification]</td></tr> <tr><td>33</td><td>—</td><td>SATELLITE ANTENNA</td></tr> <tr><td>34</td><td>SHIELD</td><td>SHIELD</td></tr> </table>	Terminal No.	Color of Wire	Signal Name [Specification]	33	—	SATELLITE ANTENNA	34	SHIELD	SHIELD						
Connector No.	B482																					
Connector Name	SATELLITE RADIO TUNER																					
Connector Type	FAKRA																					
Terminal No.	Color of Wire	Signal Name [Specification]																				
33	—	SATELLITE ANTENNA																				
34	SHIELD	SHIELD																				
<table border="1"> <tr><td>Connector No.</td><td>B483</td></tr> <tr><td>Connector Name</td><td>ANTENNA BASE</td></tr> <tr><td>Connector Type</td><td>GT16C-1PP-1U</td></tr> </table>  	Connector No.	B483	Connector Name	ANTENNA BASE	Connector Type	GT16C-1PP-1U	<table border="1"> <tr><td>Terminal No.</td><td>Color of Wire</td><td>Signal Name [Specification]</td></tr> <tr><td>3</td><td>—</td><td>—</td></tr> <tr><td>4</td><td>SHIELD</td><td>—</td></tr> </table>	Terminal No.	Color of Wire	Signal Name [Specification]	3	—	—	4	SHIELD	—						
Connector No.	B483																					
Connector Name	ANTENNA BASE																					
Connector Type	GT16C-1PP-1U																					
Terminal No.	Color of Wire	Signal Name [Specification]																				
3	—	—																				
4	SHIELD	—																				
<table border="1"> <tr><td>Connector No.</td><td>D1</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40PW-CS15</td></tr> </table>  	Connector No.	D1	Connector Name	WIRE TO WIRE	Connector Type	TH40PW-CS15	<table border="1"> <tr><td>Terminal No.</td><td>Color of Wire</td><td>Signal Name [Specification]</td></tr> <tr><td>12</td><td>L</td><td>—</td></tr> <tr><td>11</td><td>W</td><td>—</td></tr> </table>	Terminal No.	Color of Wire	Signal Name [Specification]	12	L	—	11	W	—						
Connector No.	D1																					
Connector Name	WIRE TO WIRE																					
Connector Type	TH40PW-CS15																					
Terminal No.	Color of Wire	Signal Name [Specification]																				
12	L	—																				
11	W	—																				
<table border="1"> <tr><td>Connector No.</td><td>D4</td></tr> <tr><td>Connector Name</td><td>TWEETER LH</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table>  	Connector No.	D4	Connector Name	TWEETER LH	Connector Type	TK02FBR	<table border="1"> <tr><td>Terminal No.</td><td>Color of Wire</td><td>Signal Name [Specification]</td></tr> <tr><td>1</td><td>L</td><td>—</td></tr> <tr><td>2</td><td>W</td><td>—</td></tr> </table>	Terminal No.	Color of Wire	Signal Name [Specification]	1	L	—	2	W	—						
Connector No.	D4																					
Connector Name	TWEETER LH																					
Connector Type	TK02FBR																					
Terminal No.	Color of Wire	Signal Name [Specification]																				
1	L	—																				
2	W	—																				
<table border="1"> <tr><td>Connector No.</td><td>D6</td></tr> <tr><td>Connector Name</td><td>DOOR SPEAKER LH</td></tr> <tr><td>Connector Type</td><td>NS02FW-CS</td></tr> </table>  	Connector No.	D6	Connector Name	DOOR SPEAKER LH	Connector Type	NS02FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>Color of Wire</td><td>Signal Name [Specification]</td></tr> <tr><td>1</td><td>L</td><td>—</td></tr> <tr><td>2</td><td>W</td><td>—</td></tr> </table>	Terminal No.	Color of Wire	Signal Name [Specification]	1	L	—	2	W	—						
Connector No.	D6																					
Connector Name	DOOR SPEAKER LH																					
Connector Type	NS02FW-CS																					
Terminal No.	Color of Wire	Signal Name [Specification]																				
1	L	—																				
2	W	—																				
<table border="1"> <tr><td>Connector No.</td><td>D31</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40PW-CS15</td></tr> </table>  	Connector No.	D31	Connector Name	WIRE TO WIRE	Connector Type	TH40PW-CS15	<table border="1"> <tr><td>Terminal No.</td><td>Color of Wire</td><td>Signal Name [Specification]</td></tr> <tr><td>11</td><td>W</td><td>—</td></tr> <tr><td>12</td><td>L</td><td>—</td></tr> </table>	Terminal No.	Color of Wire	Signal Name [Specification]	11	W	—	12	L	—						
Connector No.	D31																					
Connector Name	WIRE TO WIRE																					
Connector Type	TH40PW-CS15																					
Terminal No.	Color of Wire	Signal Name [Specification]																				
11	W	—																				
12	L	—																				

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# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	D34
Connector Name	TWEETER RH
Connector Type	TK02BR



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	W	

Connector No.	D36
Connector Name	DOOR SPEAKER RH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	W	

Connector No.	E5
Connector Name	HOME INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20FW-CS/2-M4-1V



Terminal No.	Color of Wire	Signal Name [Specification]
25	G	

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS/6-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	
89	W	
89	O	

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH (WITH A/T)
Connector Type	TB01FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	

Connector No.	F56
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	O	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
30	R	
31	R	
41	O	

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

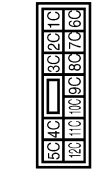
Connector No.	F167
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG



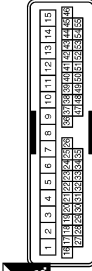
Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS08FW-M2



Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-GS15



Terminal No.	7
Color of Wire	L
Signal Name [Specification]	REV LAMP RLY

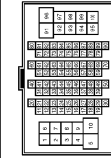
Terminal No.	2A
Color of Wire	G
Signal Name [Specification]	

Terminal No.	12C
Color of Wire	R
Signal Name [Specification]	

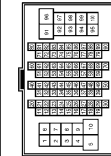
Terminal No.	11
Color of Wire	W
Signal Name [Specification]	



Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



Terminal No.	6
Color of Wire	Y
Signal Name [Specification]	

Terminal No.	49
Color of Wire	SB
Signal Name [Specification]	

Terminal No.	1
Color of Wire	L
Signal Name [Specification]	

Terminal No.	1
Color of Wire	L
Signal Name [Specification]	

JCNWA2407GB

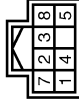
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M89
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M29
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	M87
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH02FW-NH



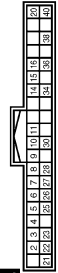
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M86
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (6-PULSE)

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

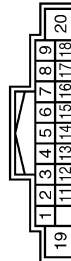
## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	O	ACC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
11	P	COMM (CONT->DISP)
13	BR	INVERTER GND

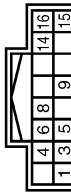
Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-CS2



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	FRONT DOOR SPEAKER LH (+)
3	W	FRONT DOOR SPEAKER LH (-)
4	LG	REAR SPEAKER LH (+)
5	SB	REAR SPEAKER LH (-)
6	P	STRG SW A
7	V	ACC
8	B	GND
9	I	ILLUMINATION
11	BR	FRONT DOOR SPEAKER RH (+)
12	SB	FRONT DOOR SPEAKER RH (-)
13	L	REAR SPEAKER RH (+)

14	LG	SIGNAL GND
15	SR	COMPOSITE IMAGE SIGNAL
16	BR	COMPOSITE SYNC
17	G	RGB (RED)
18	P	RGB (BLUE) SIGNAL
19	W	RGB SYNC
20	G	VP
21	SHIELD	SHIELD
22	L	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	ACC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

14	P	REAR SPEAKER RH (-)
15	B	STRG SW GND
16	L	STRG SW B
17	B	GND
19	Y	BATTERY
20	B	GND

Connector No.	M82
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	JA12FW



Terminal No.	Color of Wire	Signal Name [Specification]
21	W	SOUND SIGNAL LH (-)
22	B	SOUND SIGNAL LH (+)
23	R	SOUND SIGNAL RH (-)
24	G	SOUND SIGNAL RH (+)
25	SHIELD	SHIELD
26	SHIELD	SHIELD
28	P	REQUEST (SAT->CONT)
29	G	COMM (SAT->CONT)
30	L	COMM (CONT->SAT)

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
47	SB	COMPOSITE IMAGE SIGNAL
48	V	COMPOSITE IMAGE GND
37	P	RGB (B/BLUE) SIGNAL
38	L	RGB (G/GREEN) SIGNAL
39	G	RGB (R/RED) SIGNAL
40	W	RGB SYNC
41	SHIELD	SHIELD
42	B	RGB AREA (VS) SIGNAL
43	L	COMM (DISP->CONT)
44	R	HP
45	R	HP
46	LG	SIGNAL GND

Terminal No.	Color of Wire	Signal Name [Specification]
47	SB	COMPOSITE IMAGE SIGNAL
48	V	COMPOSITE IMAGE GND
37	P	RGB (B/BLUE) SIGNAL
38	L	RGB (G/GREEN) SIGNAL
39	G	RGB (R/RED) SIGNAL
40	W	RGB SYNC
41	SHIELD	SHIELD
42	B	RGB AREA (VS) SIGNAL
43	L	COMM (DISP->CONT)
44	R	HP
45	R	HP
46	LG	SIGNAL GND

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH22FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	L	AV COMM (H) [Without BOSE system]
89	P	AV COMM (L) [Without BOSE system]
90	V	AV COMM (H) [Without BOSE system]
91	LG	AV COMM (L) [Without BOSE system]
92	R	AUX SOUND SIGNAL RH (4)
93	W	AUX SOUND SIGNAL LH (4)
94	B	AUX SOUND SIGNAL LH (6)
95	B	AUX SOUND SIGNAL LH (6)
101	BR	SIV GND

Terminal No.	Color of Wire	Signal Name [Specification]
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	L	AV COMM (H) [Without BOSE system]
89	P	AV COMM (L) [Without BOSE system]
90	V	AV COMM (H) [Without BOSE system]
91	LG	AV COMM (L) [Without BOSE system]
92	R	AUX SOUND SIGNAL RH (4)
93	W	AUX SOUND SIGNAL LH (4)
94	B	AUX SOUND SIGNAL LH (6)
95	B	AUX SOUND SIGNAL LH (6)
101	BR	SIV GND

Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	GR	CAMERA CONNECTION RECOGNITION
73	B	SHIELD
74	R	AUX IMAGE GND

Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	GR	CAMERA CONNECTION RECOGNITION
73	B	SHIELD
74	R	AUX IMAGE GND

Connector No.	M107
Connector Name	ECM
Connector Type	FR24FGY-R2S-R-LH-Z

Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MW-NS10

Terminal No.	Color of Wire	Signal Name [Specification]
128	L24	112 108 104 103
127	L23	107 103 99
126	L22	114 110 106 102 98
125	L21	111 113 105 101 97

Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

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AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
57	V	-
58	LG	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	P	-
65	SB	-
66	Y	-
69	L	-
70	P	-

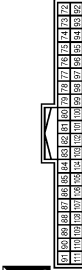
Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)
Connector Type	A05FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

80	W	-
81	B	-
82	R	-
83	G	-
84	SHIELD	-
85	G	-
86	L	-
87	P	-
88	SHIELD	-
89	Y	-
90	W	-
92	P	-
97	L	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



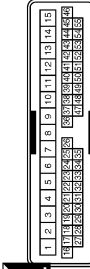
Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	-	-
15	-	-
17	-	-

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-GS15



Terminal No.	Color of Wire	Signal Name [Specification]
11	SB	-
12	BR	-

Connector No.	M361
Connector Name	WIRE TO WIRE
Connector Type	TH080MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R	-
4	W	-
5	SHIELD	-
6	SHIELD	-
7	G	-
8	R	-

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# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]


## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M376
Connector Name	AUXILIARY INPUT JACKS (WITH M/T)
Connector Type	20PFW




Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M370
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	GT13SH-2/1S-HU




Terminal No.	Color of Wire	Signal Name [Specification]
34	-	AM-FM MAIN
35	-	ANTENNA AMP. ON SIGNAL

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SSH-1/1PP-HU




Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU




Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SSH-1/1PP-HU



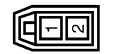
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M381
Connector Name	ANTENNA BASE
Connector Type	GT13SSH-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP. ON SIGNAL
2	-	AM-FM MAIN

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

DTC Index

SELF-DIAGNOSIS RESULTS DISPLAY ITEM

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A  
B  
C  
D  
E  
F  
G  
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AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

DTC	Display item	Refer to
U1000	CAN COMM CIRCUIT [U1000]	<a href="#">AV-37, "Diagnosis Procedure"</a>
U1010	CONTROL UNIT (CAN) [U1010]	<a href="#">AV-38, "Diagnosis Procedure"</a>
U1310	CONTROL UNIT (AV) [U1310]	<a href="#">AV-39, "DTC Logic"</a>
U1200	Cont Unit FLASH-ROM [U1200]	<a href="#">AV-40, "DTC Logic"</a>
U1216	CAN CONT [U1216]	<a href="#">AV-41, "DTC Logic"</a>
U1243	FRONT DISP CONN [U1243]	<a href="#">AV-42, "Diagnosis Procedure"</a>
U1250	CAMERA CONT. CONN [U1250]	<a href="#">AV-44, "DTC Logic"</a>
U1255	SAT CONN [U1255]	<a href="#">AV-45, "Diagnosis Procedure"</a>
U1300 U1240	<ul style="list-style-type: none"><li>• AV COMM CIRCUIT [U1300]</li><li>• SWITCH CONN [U1240]</li></ul>	<a href="#">AV-47, "Description"</a>
U1300 U1252	<ul style="list-style-type: none"><li>• AV COMM CIRCUIT [U1300]</li><li>• REAR CAMERA LAN CONN [U1252]</li></ul>	<a href="#">AV-47, "Description"</a>
U1300 U1240 U1252	<ul style="list-style-type: none"><li>• AV COMM CIRCUIT [U1300]</li><li>• SWITCH CONN [U1240]</li><li>• REAR CAMERA LAN CONN [U1252]</li></ul>	<a href="#">AV-47, "Description"</a>

# DISPLAY UNIT

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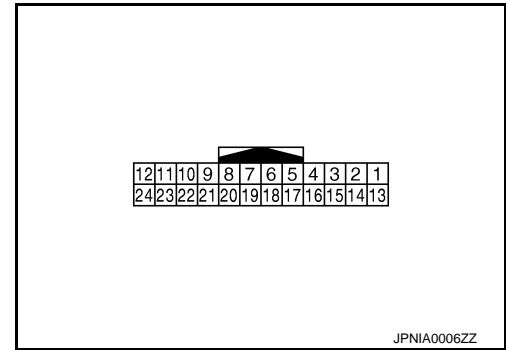
[BASE AUDIO WITHOUT NAVIGATION]

## DISPLAY UNIT

Reference Value

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TERMINAL LAYOUT



PHYSICAL VALUES

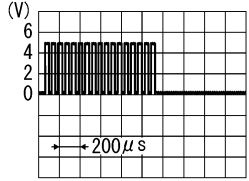
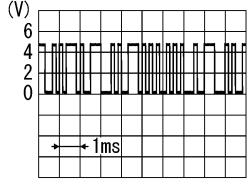
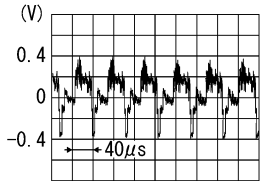
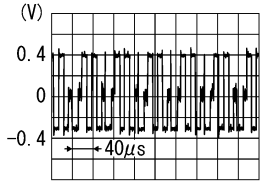
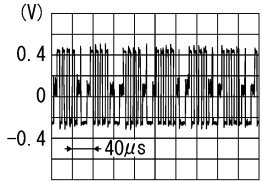
Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
1 (B)	Ground	GND	—	Ignition switch ON	—	0 V
2 (Y)	Ground	Inverter VCC	Input	Ignition switch ACC	—	9 V
3 (O)	Ground	Signal VCC	Input	Ignition switch ACC	—	9 V
4 (L)	Ground	AUX image GND	—	Ignition switch ON	—	0 V
5	—	Shield	—	—	—	—
6 (L)	Ground	RGB signal (G: green)	Input	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting “Color Spectrum Bar” on DISPLAY DIAGNOSIS screen.	
7	—	Shield	—	—	—	—
8 (R)	Ground	Horizontal synchronizing (HP) signal	Output	Ignition switch ON	—	

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< ECU DIAGNOSIS INFORMATION >

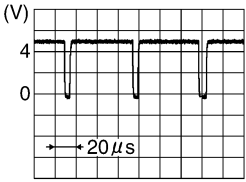
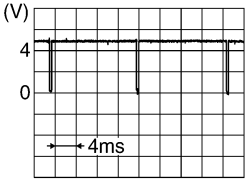
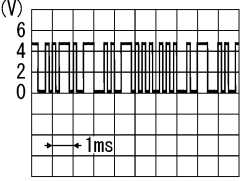
[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition	Reference value (Approx.)	
+	-	Signal name	Input/ Output			
9 (B)	Ground	RGB area (YS) signal	Input	Ignition switch ON	At RGB image is displayed 5 V	
				At AUX image is displayed	 <p style="text-align: right; font-size: small;">PKIB4948J</p>	
11 (P)	Ground	Communication signal (CONT→DISP)	Input	Ignition switch ON	When adjusting display brightness.	 <p style="text-align: right; font-size: small;">PKIB5039J</p>
13 (BR)	Ground	Inverter GND	—	Ignition switch ON	—	0 V
14 (LG)	Ground	Signal GND	—	Ignition switch ON	—	0 V
15 (SB)	Ground	Composite image signal	Input	Ignition switch ON	At AUX image is displayed	 <p style="text-align: right; font-size: small;">SKIB2251J</p>
17 (G)	Ground	RGB signal (R: red)	Input	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p style="text-align: right; font-size: small;">SKIB2238J</p>
18 (P)	Ground	RGB signal (B: blue)	Input	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p style="text-align: right; font-size: small;">SKIB2237J</p>

# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
19 (W)	Ground	RGB synchronizing signal	Input	Ignition switch ON	—	 SKIB3603E
20 (GR)	Ground	Vertical synchronizing (VP) signal	Output	Ignition switch On	—	 SKIB3598E
21	—	Shield	—	—	—	—
22 (L)	Ground	Communication signal (DISP→CONT)	Output	Ignition switch ON	When adjusting display brightness.	 PKIB5039J
23	—	Shield	—	—	—	—

Wiring Diagram - BASE AUDIO WITHOUT NAVIGATION SYSTEM -

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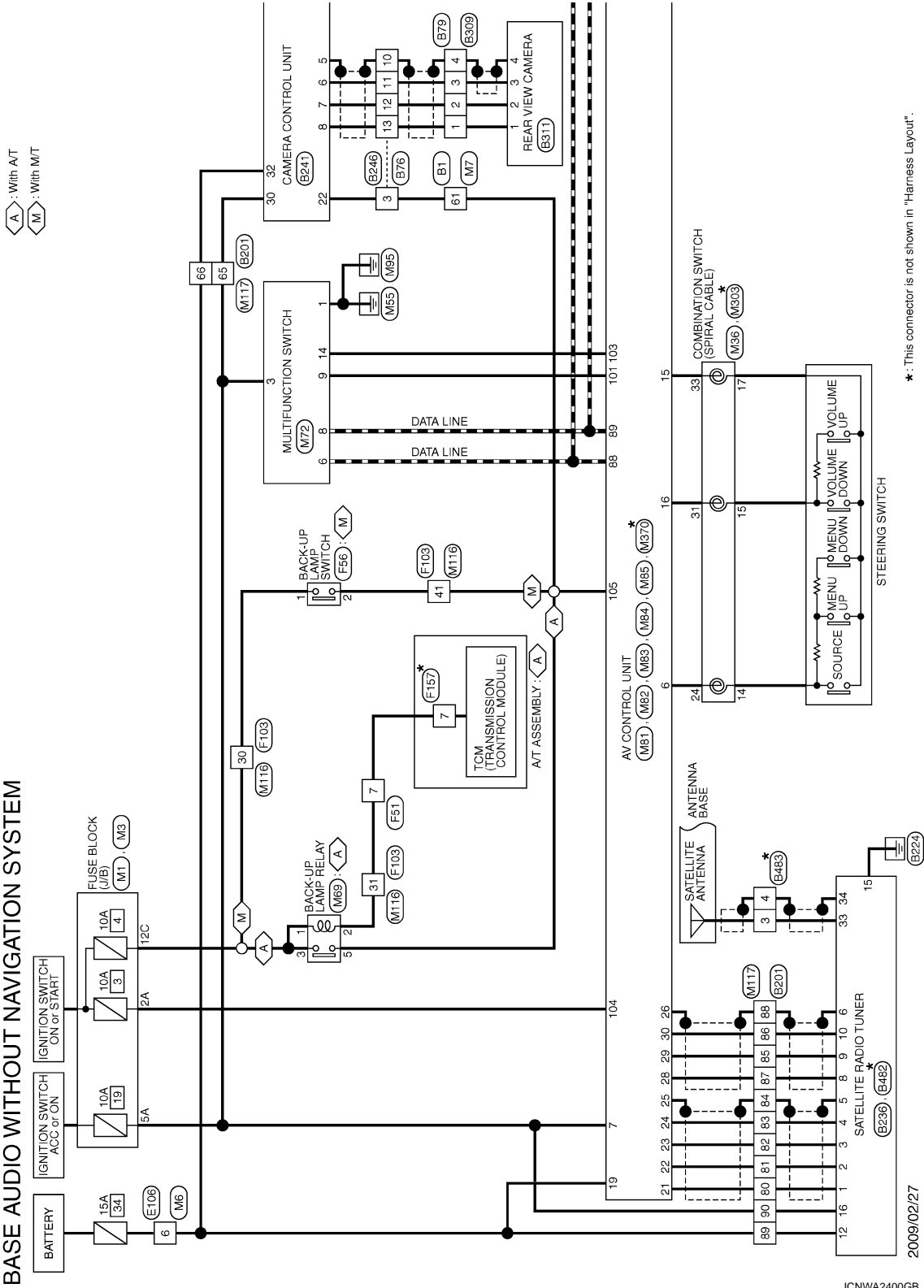
# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

## BASE AUDIO WITHOUT NAVIGATION SYSTEM



\*: This connector is not shown in "Harness Layout".

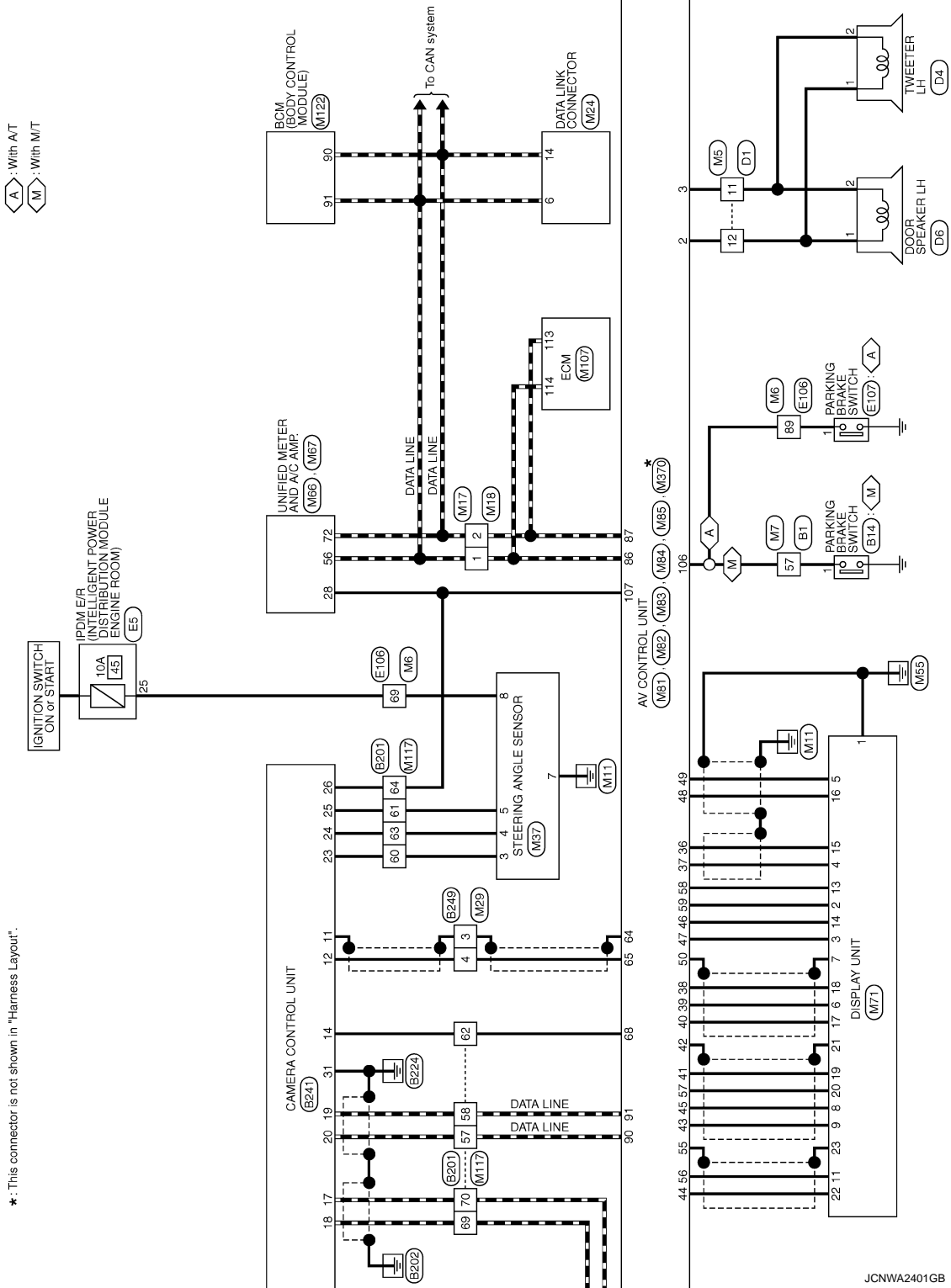
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# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]



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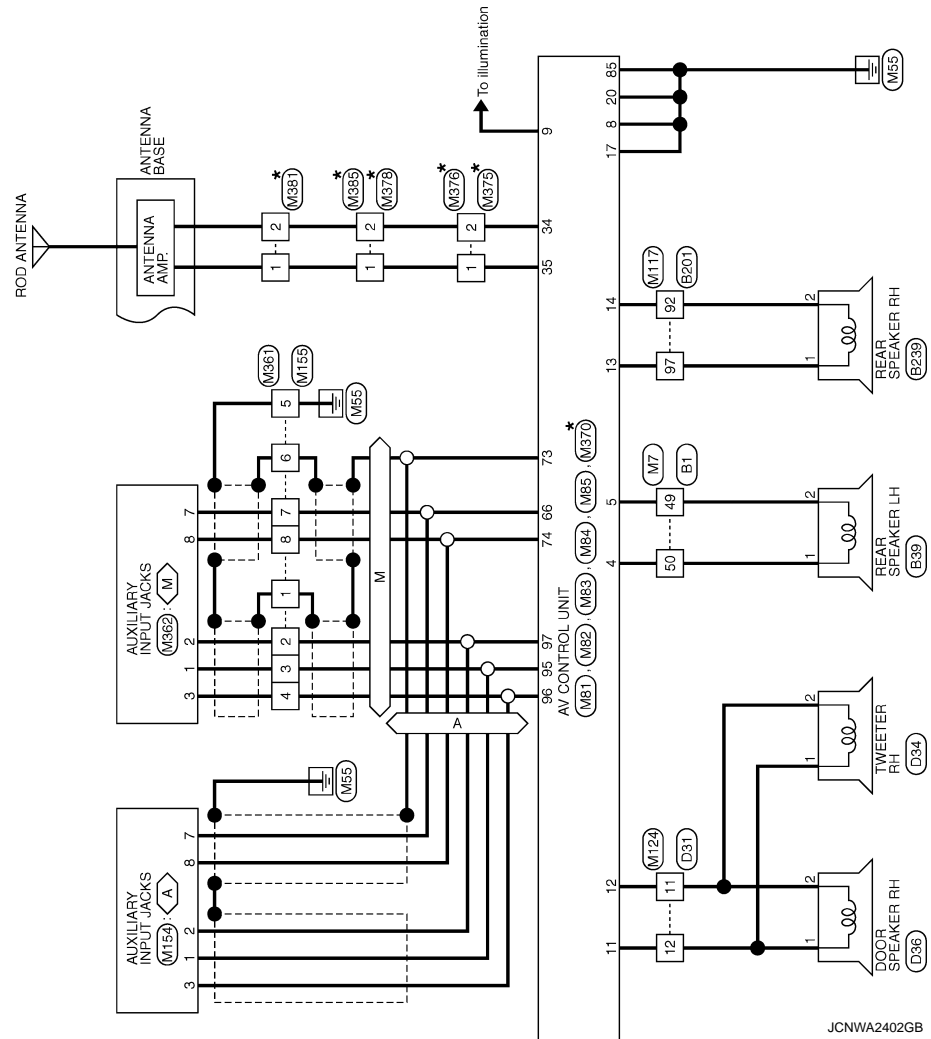
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< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

: With A/T  
 : With M/T

\*: This connector is not shown in "Harness Layout".

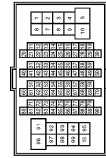


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**BASE AUDIO WITHOUT NAVIGATION SYSTEM**

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
49	Y	- [Without BOSE system]
50	LG	- [Without BOSE system]
57	V	-
61	O	-

Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	PO1EB-A



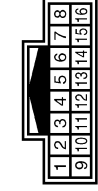
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

Connector No.	B39
Connector Name	REAR SPEAKER LH
Connector Type	NS32FW-CS



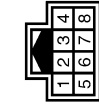
Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	Y	-

Connector No.	B76
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH



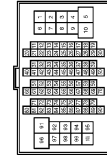
Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	SHIELD	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
57	G	-
58	R	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	V	-
65	SB	-
66	Y	-
68	L	-
70	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
80	G	-
81	R	-
82	W	-
83	B	-
84	SHIELD	-
85	O	-
86	BR	-
87	Y	-
88	SHIELD	-
89	SB	-
90	V	-
92	Y	- [Without BOSE system]
97	LG	- [Without BOSE system]

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# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B236
Connector Name	SATELLITE RADIO TUNER
Connector Type	AV6FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	Y	REQUEST (SAT->CONT)
9	O	COMM (SAT->CONT)
10	BR	COMM (CONT->SAT)
12	SB	BATTERY
15	B	GND

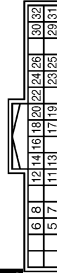
16	V	ACC
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Connector No.	B239
Connector Name	REAR SPEAKER RH
Connector Type	NS302FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	
2	Y	

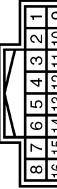
Connector No.	B241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (R)
19	R	AV COMM (L)
20	G	AV COMM (R)

22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	O	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (8-PULSE)
30	SB	ACC
31	B	GND
32	Y	BATTERY

Connector No.	B246
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	
10	SHIELD	
11	B	
12	W	
13	R	

Connector No.	B249
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	
4	W	

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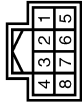
# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B309
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	Y	-
4	SHIELD	-

Connector No.	B311
Connector Name	REAR VIEW CAMERA
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	CAMERA ON SIGNAL
2	W	GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	B482
Connector Name	SATELLITE RADIO TUNER
Connector Type	FAKRA



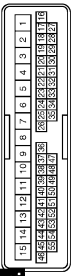
Terminal No.	Color of Wire	Signal Name [Specification]
33	-	SATELLITE ANTENNA
34	SHIELD	SHIELD

Connector No.	B483
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-1U



Terminal No.	Color of Wire	Signal Name [Specification]
3	-	-
4	SHIELD	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH09FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
11	W	-
12	L	-

Connector No.	D4
Connector Name	TWEETER LH
Connector Type	TK02FBR



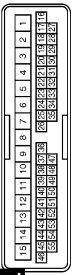
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	D6
Connector Name	DOOR SPEAKER LH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
11	W	-
12	L	-

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AV

# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	D34
Connector Name	TWEETER RH
Connector Type	TK02BR



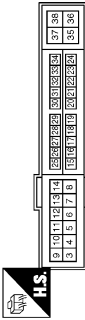
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	W	

Connector No.	D36
Connector Name	DOOR SPEAKER RH
Connector Type	NS02FW-CS



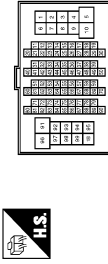
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	W	

Connector No.	E5
Connector Name	BOWSER INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20FW-CS/ZE-M4-1V



Terminal No.	Color of Wire	Signal Name [Specification]
25	G	

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS/6-TM4



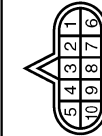
Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	
89	W	
89	O	

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH (WITH A/T)
Connector Type	TB01FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



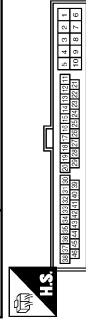
Terminal No.	Color of Wire	Signal Name [Specification]
7	R	

Connector No.	F56
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	O	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK30FW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
30	R	
31	R	
41	O	

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< ECU DIAGNOSIS INFORMATION >

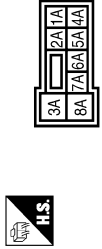
[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

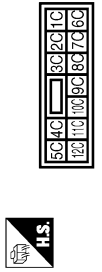
Connector No.	F157
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG



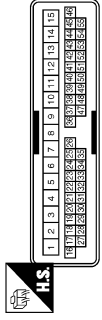
Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	7	L	REV LAMP RLY
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Terminal No.	2A	G	
Terminal No.	5A	L	

Terminal No.	12C	R	
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Terminal No.	11	W	
Terminal No.	12	L	

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



Terminal No.	6	Y	
Terminal No.	69	G	
Terminal No.	89	O	

Terminal No.	49	SB	
Terminal No.	50	LG	
Terminal No.	57	O	
Terminal No.	61	O	

Terminal No.	1	L	
Terminal No.	2	P	

Terminal No.	1	L	
Terminal No.	2	P	

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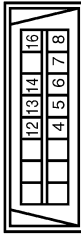
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< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]


## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



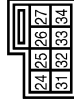
Terminal No.	Color of Wire	Signal Name [Specification]
6	L	
14	P	

Connector No.	M29
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH



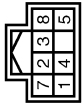
Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	
4	W	

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV




Terminal No.	Color of Wire	Signal Name [Specification]
24	P	
31	L	
33	B	

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M68
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH00FW-NH




Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (8-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH02FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M69
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	W	
3	LG	
5	O	

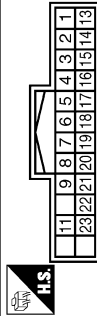
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< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH18FW-RH



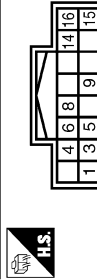
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	O	ACC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (G, GREEN) SIGNAL
7	L	SHIELD
8	R	SHIELD
9	B	HP
10	B	RGB AREA (YS) SIGNAL
11	P	COMM (CONT->DISP)
12	P	INVERTER GND
13	BR	BR

Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-GS2



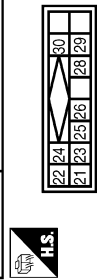
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	FRONT DOOR SPEAKER LH (+)
2	L	FRONT DOOR SPEAKER LH (-)
3	W	REAR DOOR SPEAKER LH (+)
4	LG	REAR DOOR SPEAKER LH (-)
5	SB	REAR SPEAKER LH (+)
6	P	REAR SPEAKER LH (-)
7	V	STRG SW A
8	ACC	ACC
9	B	GND
10	I	ILLUMINATION
11	BR	FRONT DOOR SPEAKER RH (+)
12	SB	FRONT DOOR SPEAKER RH (-)
13	L	REAR SPEAKER RH (+)

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	L	ACC
3	L	AV COMM (H)
6	R	AV COMM (L)
8	R	SW GND
9	BR	DISK EJECT SIGNAL
14	SB	DISK EJECT SIGNAL

Connector No.	M82
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TA12FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	SOUND SIGNAL LH (-)
2	W	SOUND SIGNAL LH (+)
3	B	SOUND SIGNAL RH (-)
4	R	SOUND SIGNAL RH (+)
5	G	SHIELD
6	P	SHIELD
7	P	REQUEST (SAT->CONT)
8	G	COMM (SAT->CONT)
9	L	COMM (CONT->SAT)
10	L	COMM (CONT->SAT)

Terminal No.	Color of Wire	Signal Name [Specification]
14	LG	SIGNAL GND
15	SR	COMPOSITE IMAGE SIGNAL
16	BR	COMPOSITE SWIC
17	C	RGB (R, RED)
18	D	RGB (B, BLUE) SIGNAL
19	W	RGB STVC
20	G	RGB STVC
21	SHIELD	SHIELD
22	L	COMM (DISP->CONT)
23	SHIELD	SHIELD

Terminal No.	Color of Wire	Signal Name [Specification]
14	P	REAR SPEAKER RH (-)
15	B	STRG SW GND
16	L	STRG SW B
17	B	GND
19	Y	BATTERY
20	B	GND

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# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH32FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (BLUE) SIGNAL
39	L	RGB (GREEN) SIGNAL
40	G	RGB (RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (YS) SIGNAL
44	L	COMM (DISP->CONT)
45	R	HP
46	LG	SIGNAL GND

Terminal No.	Color of Wire	Signal Name [Specification]
47	O	SIGNAL VCC
48	BR	COMPOSITE SYNC
49	Y	SHIELD
50	SHIELD	SHIELD
51	SHIELD	SHIELD
52	P	COMM (CONT->DISP)
53	G	V+
54	BR	INVERTER GND
55	Y	INVERTER VCC

Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
67	GR	CAMERA CONNECTION RECOGNITION
73	B	SHIELD
74	R	AUX IMAGE GND

Terminal No.	Color of Wire	Signal Name [Specification]
103	SB	DISK ELECT SIGNAL
104	G	IGNITION
105	O	REVERSE
106	SB	PARKING BRAKE
107	GR	VEHICLE SPEED (8-PULSE)

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH32FW-NH

Terminal No.	Color of Wire	Signal Name [Specification]
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	L	AV COMM (H) [Without BOSE system]
89	P	AV COMM (L) [Without BOSE system]
90	V	AV COMM (H) [Without BOSE system]
91	LG	AV COMM (L) [Without BOSE system]
95	R	AUX SOUND SIGNAL (H (+))
96	W	AUX SOUND SIGNAL (L (-))
97	B	AUX SOUND SIGNAL GND
101	BR	SIV GND

Terminal No.	Color of Wire	Signal Name [Specification]
103	SB	DISK ELECT SIGNAL
104	G	IGNITION
105	O	REVERSE
106	SB	PARKING BRAKE
107	GR	VEHICLE SPEED (8-PULSE)

Connector No.	M107
Connector Name	ECM
Connector Type	FR24FGY-R2Z-R-LH-Z

Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MP-NS10

Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

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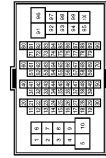
# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
57	V	-
58	LG	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	P	-
65	SB	-
66	Y	-
69	L	-
70	P	-

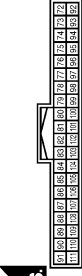
Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)
Connector Type	A05FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL LH (+)
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

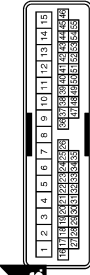
Terminal No.	Color of Wire	Signal Name [Specification]
80	W	-
81	B	-
82	P	-
83	G	-
84	SHIELD	-
85	G	-
86	L	-
87	P	-
88	SHIELD	-
89	Y	-
90	W	-
92	P	-
97	L	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MH-CS15



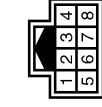
Terminal No.	Color of Wire	Signal Name [Specification]
11	SB	-
12	BR	-

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	-	-
15	-	-
17	-	-

Connector No.	M361
Connector Name	WIRE TO WIRE
Connector Type	TH08MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R	-
4	W	-
5	SHIELD	-
6	SHIELD	-
7	G	-
8	R	-

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## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M382
Connector Name	AUXILIARY INPUT JACKS (WITH M/T)
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M370
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	GT13SH-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
34	-	AM-FM MAIN
35	-	ANTENNA AMP. ON SIGNAL

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SSN-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SSN-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M381
Connector Name	ANTENNA BASE
Connector Type	GT13SSH-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP. ON SIGNAL
2	-	AM-FM MAIN

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

# SATELLITE RADIO TUNER

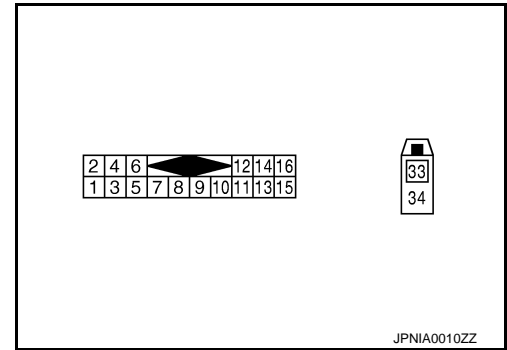
< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## SATELLITE RADIO TUNER

Reference Value

INFOID:000000004371538



### PHYSICAL VALUES

Terminal		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/Output			
2 (R)	1 (G)	Satellite radio sound signal LH	Output	Ignition switch ON	When satellite radio mode is selected	 SKIB3609E
4 (B)	3 (W)	Satellite radio sound signal RH	Output	Ignition switch ON	When satellite radio mode is selected	 SKIB3609E
5	—	Shield	—	—	—	—
6	—	Shield	—	—	—	—
8 (Y)	Ground	Request signal (SAT→CONT)	Output	Ignition switch ON	When satellite radio mode is selected	 SKIA9299J
9 (O)	Ground	Communication signal (SAT→CONT)	Output	Ignition switch ON	When satellite radio mode is selected	 SKIA9300J

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# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/Output			
10 (BR)	Ground	Communication signal (CONT→SAT)	Input	Ignition switch ON	When satellite radio mode is selected	
12 (SB)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
15 (B)	Ground	GND	—	Ignition switch ON	—	0 V
16 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
33	—	Satellite antenna	Input	—	—	—
34	—	Shield	—	—	—	—

Wiring Diagram - BASE AUDIO WITHOUT NAVIGATION SYSTEM -

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**NOTE:**

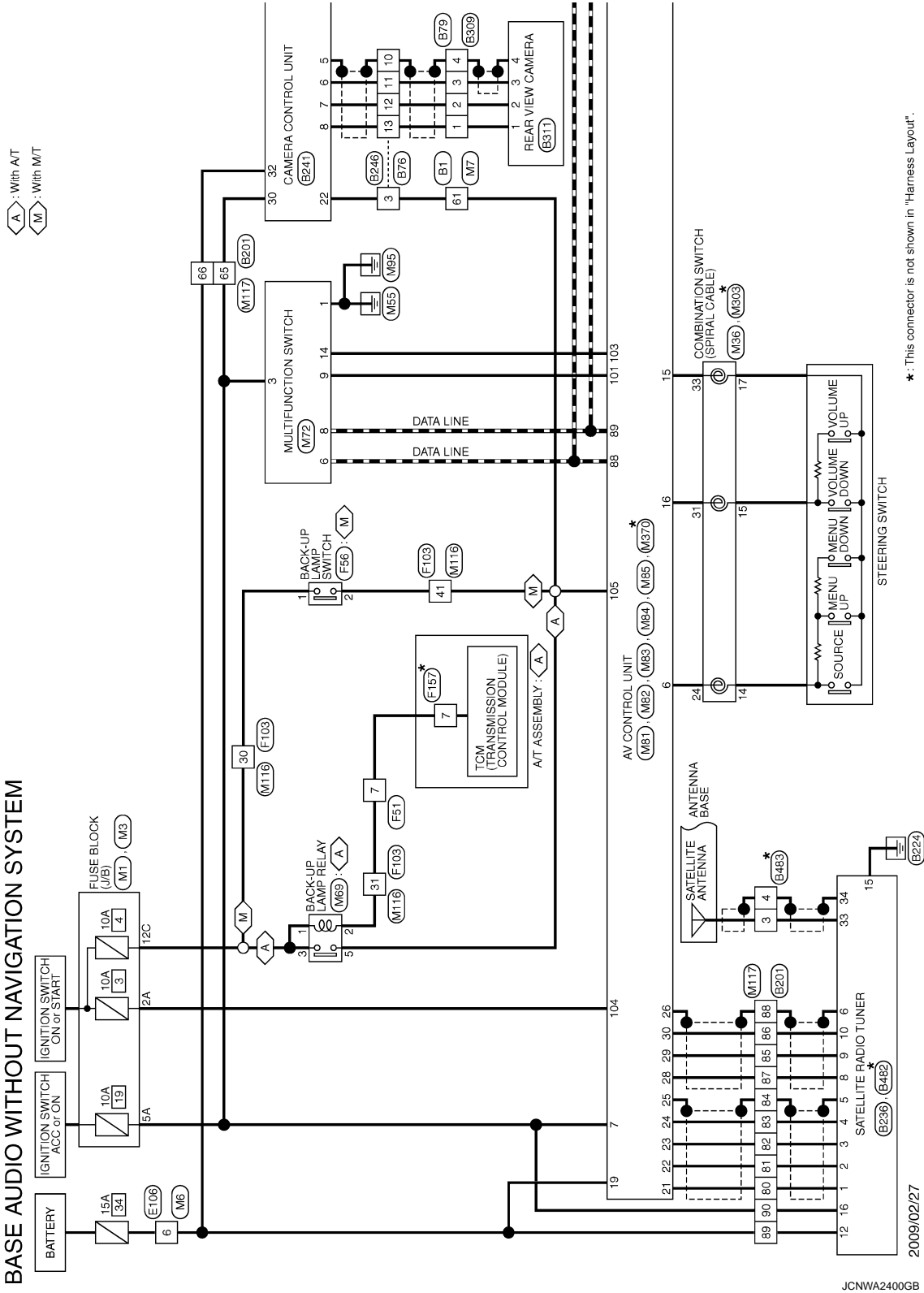
# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

## BASE AUDIO WITHOUT NAVIGATION SYSTEM



\*: This connector is not shown in "Harness Layout".

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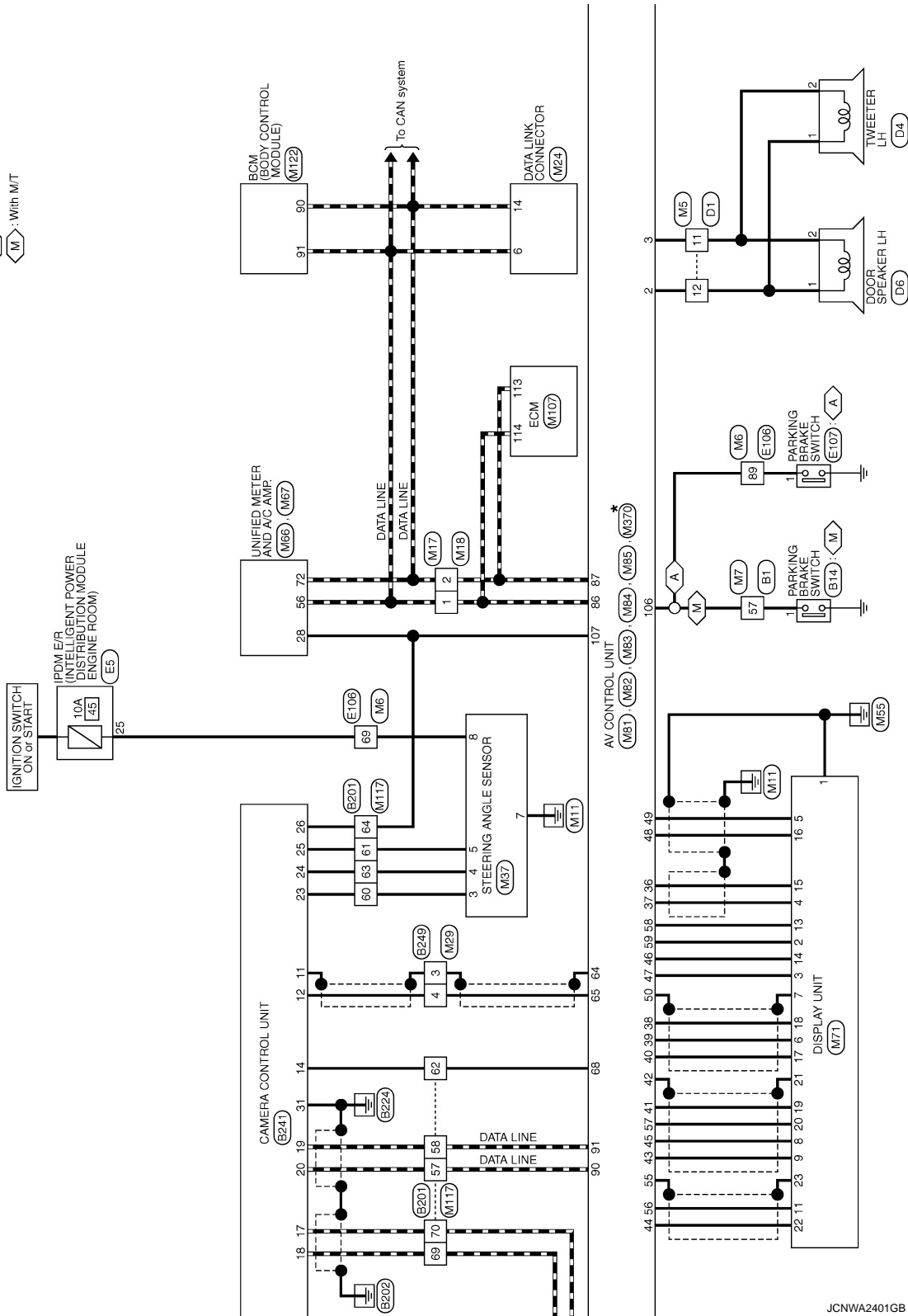
# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

\*: This connector is not shown in "Harness Layout".

A: With AT  
M: With M/T



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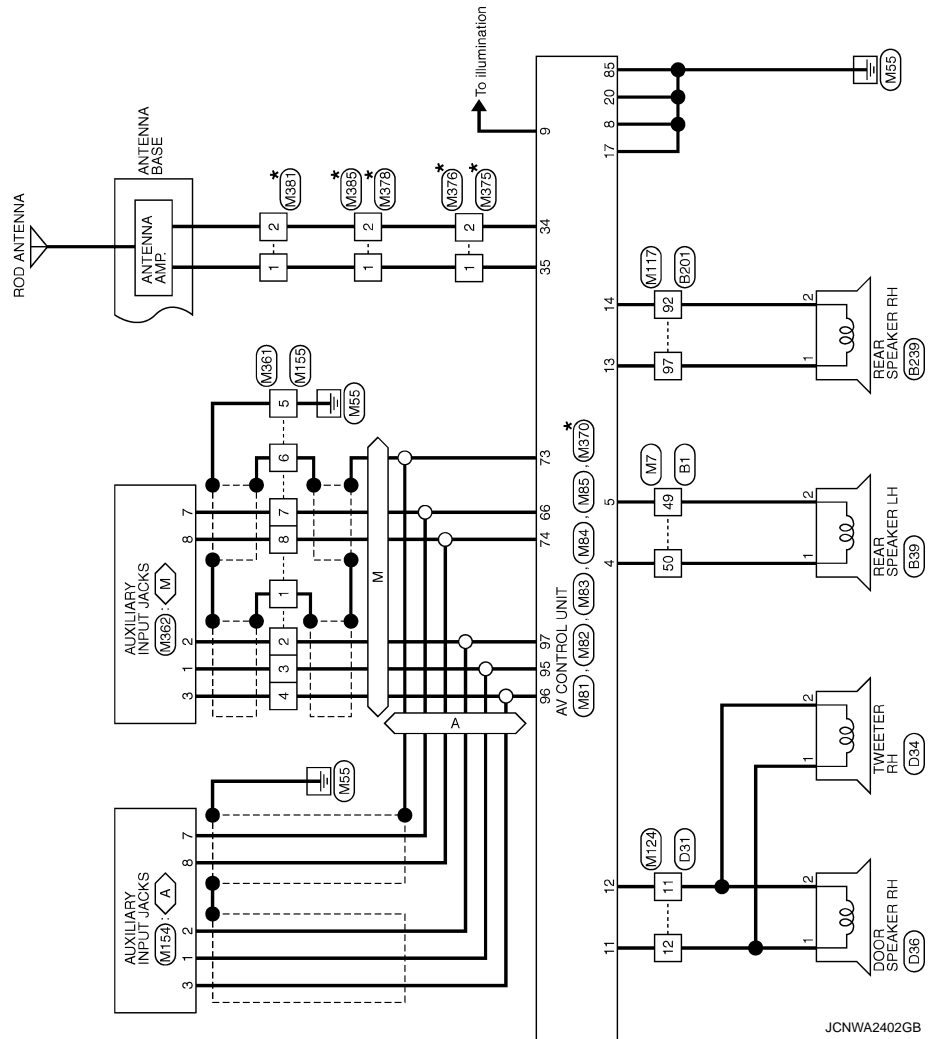
# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

A : With A/T  
M : With M/T

\*: This connector is not shown in "Harness Layout".



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# SATELLITE RADIO TUNER

[BASE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
48	Y	- [Without BOSE system]
50	LG	- [Without BOSE system]
57	V	-
61	O	-

Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	P01EB-A



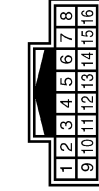
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

Connector No.	B39
Connector Name	REAR SPEAKER LH
Connector Type	NS302FW-CS



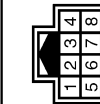
Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	Y	-

Connector No.	B76
Connector Name	WIRE TO WIRE
Connector Type	TH10BMV-NH



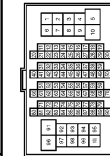
Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH10BMV-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	SHIELD	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
57	G	-
58	R	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	V	-
65	SB	-
66	Y	-
68	L	-
70	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
80	G	-
81	R	-
82	W	-
83	B	-
84	SHIELD	-
85	O	-
86	BR	-
87	Y	-
88	SHIELD	-
89	SB	-
90	V	-
92	Y	- [Without BOSE system]
97	LG	- [Without BOSE system]



# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B236
Connector Name	SATELLITE RADIO TUNER
Connector Type	TA16FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	Y	REQUEST (SAT->CONT)
9	O	COMM (SAT->CONT)
10	BR	COMM (CONT->SAT)
12	SB	BATTERY
15	B	GND

Connector No.	B241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH22FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (R)
19	R	AV COMM (L)
20	G	AV COMM (R)

Terminal No.	16	Y	ACC
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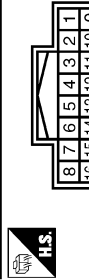
Connector No.	B239
Connector Name	REAR SPEAKER RH
Connector Type	NS22FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	
2	Y	

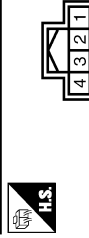
22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	O	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (8-PULSE)
30	SB	ACC
31	B	GND
32	Y	BATTERY

Connector No.	B246
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	
10	SHIELD	
11	B	
12	W	
13	R	

Connector No.	B249
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	
4	W	

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A  
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L  
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O  
P

AV

# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B309
Connector Name	WIRE TO WIRE
Connector Type	TH40PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	—
2	W	—
3	Y	—
4	SHIELD	—

Connector No.	B311
Connector Name	REAR VIEW CAMERA
Connector Type	TH40MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	CAMERA ON SIGNAL
2	W	GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	B482
Connector Name	SATELLITE RADIO TUNER
Connector Type	FAKRA



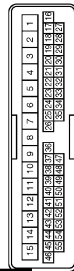
Terminal No.	Color of Wire	Signal Name [Specification]
33	—	SATELLITE ANTENNA
34	SHIELD	SHIELD

Connector No.	B483
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-1U



Terminal No.	Color of Wire	Signal Name [Specification]
3	—	—
4	SHIELD	—

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40PW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
12	L	—
11	W	—
10	—	—

Connector No.	D4
Connector Name	TWEETER LH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	—
2	W	—

Connector No.	D6
Connector Name	DOOR SPEAKER LH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	—
2	W	—

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40PW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
11	W	—
12	L	—

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# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	D34
Connector Name	TWEETER RH
Connector Type	TK02BR



Terminal No.	1	2
Color of Wire	L	W
Signal Name [Specification]		

Connector No.	E5
Connector Name	HOME INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20FW-CS/E-M4-1V



Terminal No.	25
Color of Wire	G
Signal Name [Specification]	

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS/B-TM4



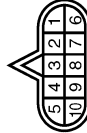
Terminal No.	6	89	89
Color of Wire	Y	W	O
Signal Name [Specification]			

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH (WITH A/T)
Connector Type	TB01FW



Terminal No.	1
Color of Wire	O
Signal Name [Specification]	

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



Terminal No.	7
Color of Wire	R
Signal Name [Specification]	

Connector No.	F56
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02FB



Terminal No.	1	2
Color of Wire	R	O
Signal Name [Specification]		

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10



Terminal No.	30	31	41
Color of Wire	R	R	O
Signal Name [Specification]			

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K  
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M  
N  
O  
P

AV

# SATELLITE RADIO TUNER

[BASE AUDIO WITHOUT NAVIGATION]

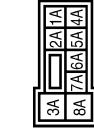
< ECU DIAGNOSIS INFORMATION >

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	FI157
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG

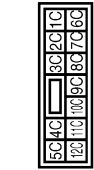


Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS08FW-M2



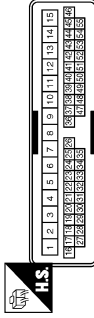
Terminal No.	7
Color of Wire	L
Signal Name [Specification]	REV LAMP RLY

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	12C
Color of Wire	R
Signal Name [Specification]	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-GS15



Terminal No.	11
Color of Wire	W
Signal Name [Specification]	-
Terminal No.	12
Color of Wire	L
Signal Name [Specification]	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH160MW-CS16-TM4



Terminal No.	6
Color of Wire	Y
Signal Name [Specification]	-
Terminal No.	69
Color of Wire	G
Signal Name [Specification]	-
Terminal No.	89
Color of Wire	O
Signal Name [Specification]	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH160MW-CS16-TM4



Terminal No.	49
Color of Wire	SB
Signal Name [Specification]	- [Without BOSE system]
Terminal No.	50
Color of Wire	LG
Signal Name [Specification]	- [Without BOSE system]
Terminal No.	57
Color of Wire	O
Signal Name [Specification]	-
Terminal No.	61
Color of Wire	O
Signal Name [Specification]	-

Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FV



Terminal No.	1
Color of Wire	L
Signal Name [Specification]	-
Terminal No.	2
Color of Wire	P
Signal Name [Specification]	-

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



Terminal No.	1
Color of Wire	L
Signal Name [Specification]	-
Terminal No.	2
Color of Wire	P
Signal Name [Specification]	-

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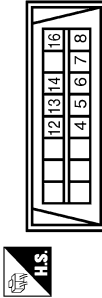
# SATELLITE RADIO TUNER

[BASE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M29
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



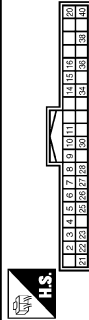
Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (6-FULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH02FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M69
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

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AV  
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P

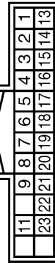
# SATELLITE RADIO TUNER

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[BASE AUDIO WITHOUT NAVIGATION]

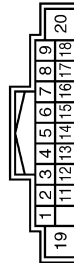
## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	O	ACC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
11	P	COMM (CONT->DISP)
13	BR	INVERTER GND

Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-CS2



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	FRONT DOOR SPEAKER LH (+)
3	W	FRONT DOOR SPEAKER LH (-)
4	LG	REAR SPEAKER LH (+)
5	SB	REAR SPEAKER LH (-)
6	P	STRG SW A
7	V	ACC
8	B	GND
9	I	ILLUMINATION
11	BR	FRONT DOOR SPEAKER RH (+)
12	SB	FRONT DOOR SPEAKER RH (-)
13	L	REAR SPEAKER RH (+)

14	LG	SIGNAL GND
15	SR	COMPOSITE IMAGE SIGNAL
16	BR	COMPOSITE SYNC
17	G	RGB (RED) SIGNAL
18	P	RGB (BLUE) SIGNAL
19	W	RGB SYNC
20	G	VP
21	SHIELD	SHIELD
22	L	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	ACC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

14	P	REAR SPEAKER RH (-)
15	B	STRG SW GND
16	L	STRG SW B
17	B	GND
19	Y	BATTERY
20	B	GND

Connector No.	M82
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	JA12FW



Terminal No.	Color of Wire	Signal Name [Specification]
21	W	SOUND SIGNAL LH (-)
22	B	SOUND SIGNAL LH (+)
23	R	SOUND SIGNAL RH (-)
24	G	SOUND SIGNAL RH (+)
25	SHIELD	SHIELD
26	SHIELD	SHIELD
28	P	REQUEST (SAT->CONT)
29	G	COMM (SAT->CONT)
30	L	COMM (CONT->SAT)

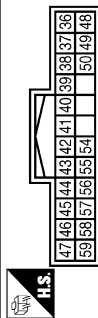
# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



47	O	SIGNAL VCC
48	BR	COMPOSITE SYNC
49	Y	SHIELD
50	SHIELD	SHIELD
51	SHIELD	SHIELD
56	P	COMM (CONT->DISP)
57	G	VP
58	BR	INVERTER GND
59	Y	INVERTER VCC

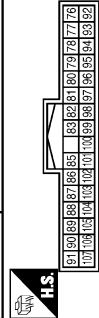
Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (BLUE) SIGNAL
39	L	RGB (GREEN) SIGNAL
40	G	RGB (RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (VS) SIGNAL
44	L	COMM (DISP->CONT)
45	R	HP
46	LG	SIGNAL GND

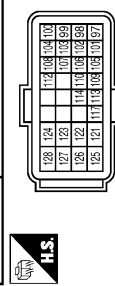
Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	GR	CAMERA CONNECTION RECOGNITION
73	B	SHIELD
74	R	AUX IMAGE GND

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH22FW-NH



103	SB	DISK EJECT SIGNAL
104	G	IGNITION
105	O	REVERSE
106	SB	PARKING BRAKE
107	GR	VEHICLE SPEED (8-PULSE)

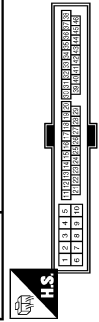
Connector No.	M107
Connector Name	ECM
Connector Type	FR24FGY-R2S-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	L	AV COMM (H) (Without BOSE system)
89	P	AV COMM (L) (Without BOSE system)
90	V	AV COMM (H) (Without BOSE system)
91	LG	AV COMM (L) (Without BOSE system)
95	R	AUX SOUND SIGNAL RH (4)
96	W	AUX SOUND SIGNAL LH (4)
97	B	AUX SOUND SIGNAL LH (6)
101	BR	SIV GND

Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

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P

AV

# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
57	V	-
58	LG	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	P	-
65	SB	-
66	Y	-
69	L	-
70	P	-

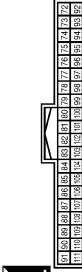
Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)
Connector Type	A05FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

80	W	-
81	B	-
82	R	-
83	G	-
84	SHIELD	-
85	G	-
86	L	-
87	P	-
88	SHIELD	-
89	Y	-
90	W	-
92	P	-
97	L	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



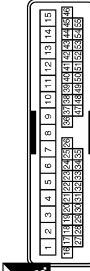
Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	-	-
15	-	-
17	-	-

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-GS15



Terminal No.	Color of Wire	Signal Name [Specification]
11	SB	-
12	BR	-

Connector No.	M361
Connector Name	WIRE TO WIRE
Connector Type	TH080MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R	-
4	W	-
5	SHIELD	-
6	SHIELD	-
7	G	-
8	R	-

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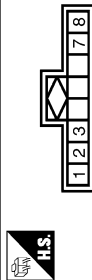
# SATELLITE RADIO TUNER

[BASE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M376
Connector Name	AUXILIARY INPUT JACKS (WITH M/T)
Connector Type	20PFW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M370
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	GT13SH-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
34	-	AM-FM MAIN
35	-	ANTENNA AMP. ON SIGNAL

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SSN-1/1P-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SSN-1/1P-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M381
Connector Name	ANTENNA BASE
Connector Type	GT13SSN-1/1P-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP. ON SIGNAL
2	-	AM-FM MAIN

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

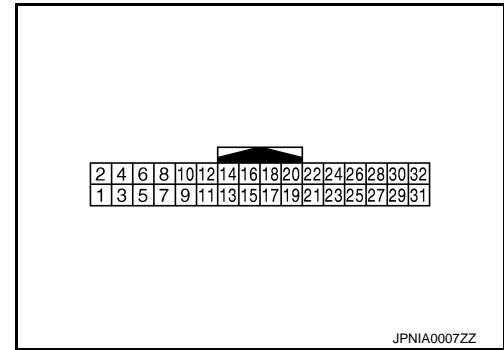
[BASE AUDIO WITHOUT NAVIGATION]

## CAMERA CONTROL UNIT

Reference Value

INFOID:000000004929978

TERMINAL LAYOUT



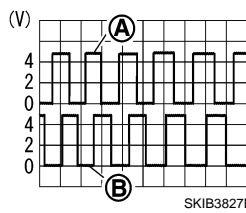
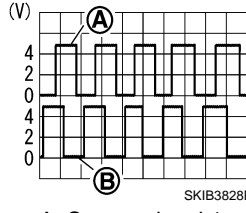
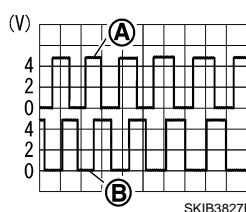
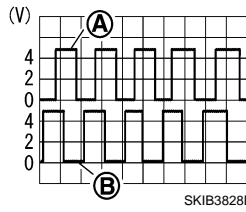
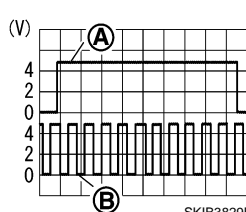
PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
5	—	Shield	—	—	—	—
6 (B)	Ground	Camera image signal	Input	Ignition switch ON	At rear view camera image is displayed.	
7 (W)	Ground	Ground	—	Ignition switch ON	—	0 V
8 (R)	Ground	Camera power supply	Output	Ignition switch ON	R position	6.0 V
					Other than R position	0 V
11	—	Shield	—	—	—	—
12 (W)	Ground	Camera image signal	Output	Ignition switch ON	At rear view camera image is displayed.	
14 (GR)	Ground	Camera connection recog- nition signal	Output	Ignition switch ON	Connected to camera con- trol unit connector.	0 V
					Not connected to camera control unit connector.	5.0 V
17 (P)	—	AV communication signal (L)	Input/ Output	—	—	—
18 (L)	—	AV communication signal (H)	Input/ Output	—	—	—
19 (R)	—	AV communication signal (L)	Input/ Output	—	—	—

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
20 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
22 (GR)	Ground	Reverse signal	Input	Ignition switch ON	R position	12.0 V
				Ignition switch ON	Other than R position	0 V
23 (L)	Ground	Sensor signal 1	Input	Ignition switch ON	Turn the steering to the right.	 <p style="text-align: right;">A: Sensor signal 1 B: Sensor signal 2</p>
					Turn the steering to the left.	 <p style="text-align: right;">A: Sensor signal 1 B: Sensor signal 2</p>
24 (BR)	Ground	Sensor signal 2	Input	Ignition switch ON	Turn the steering to the right.	 <p style="text-align: right;">A: Sensor signal 1 B: Sensor signal 2</p>
					Turn the steering to the left.	 <p style="text-align: right;">A: Sensor signal 1 B: Sensor signal 2</p>
25 (O)	Ground	Sensor signal 3	Input	Ignition switch ON	Turn the steering around the neutral position.	 <p style="text-align: right;">A: Sensor signal 3 B: Sensor signal 1</p>

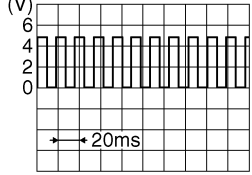
A  
B  
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D  
E  
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G  
H  
I  
J  
K  
L  
M  
O  
P

AV

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
26 (V)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is ap- prox. 40 km/h (25 MPH)	<p><b>NOTE:</b> Maximum voltage may be 12.0 V due to specifications (connected units).</p>  <p style="text-align: right; font-size: small;">SKIA6649J</p>
30 (SB)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
31 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
32 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage

## Wiring Diagram - BASE AUDIO WITHOUT NAVIGATION SYSTEM -

INFOID:000000004929982

**NOTE:**

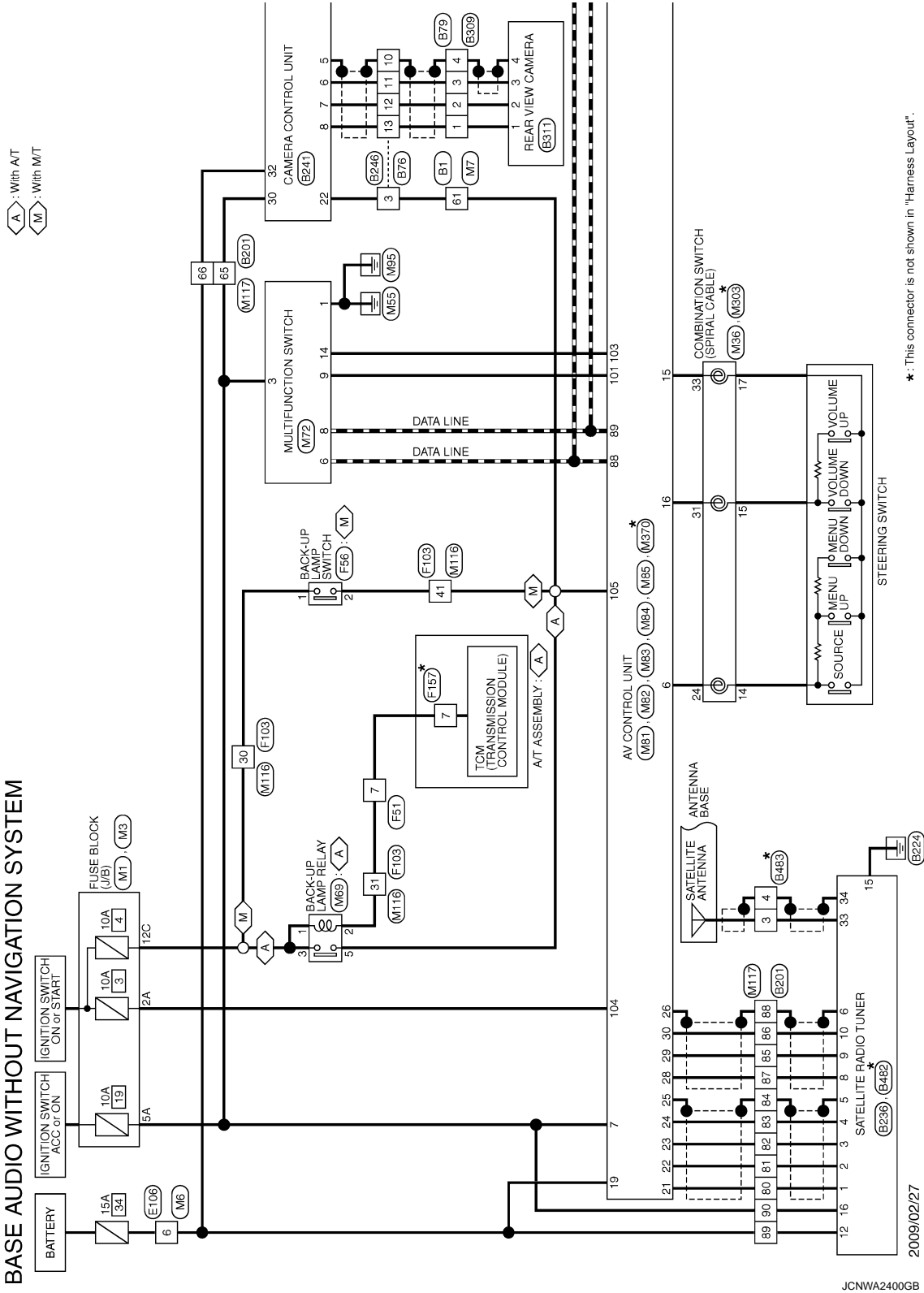
# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

## BASE AUDIO WITHOUT NAVIGATION SYSTEM



\*: This connector is not shown in "Harness Layout".

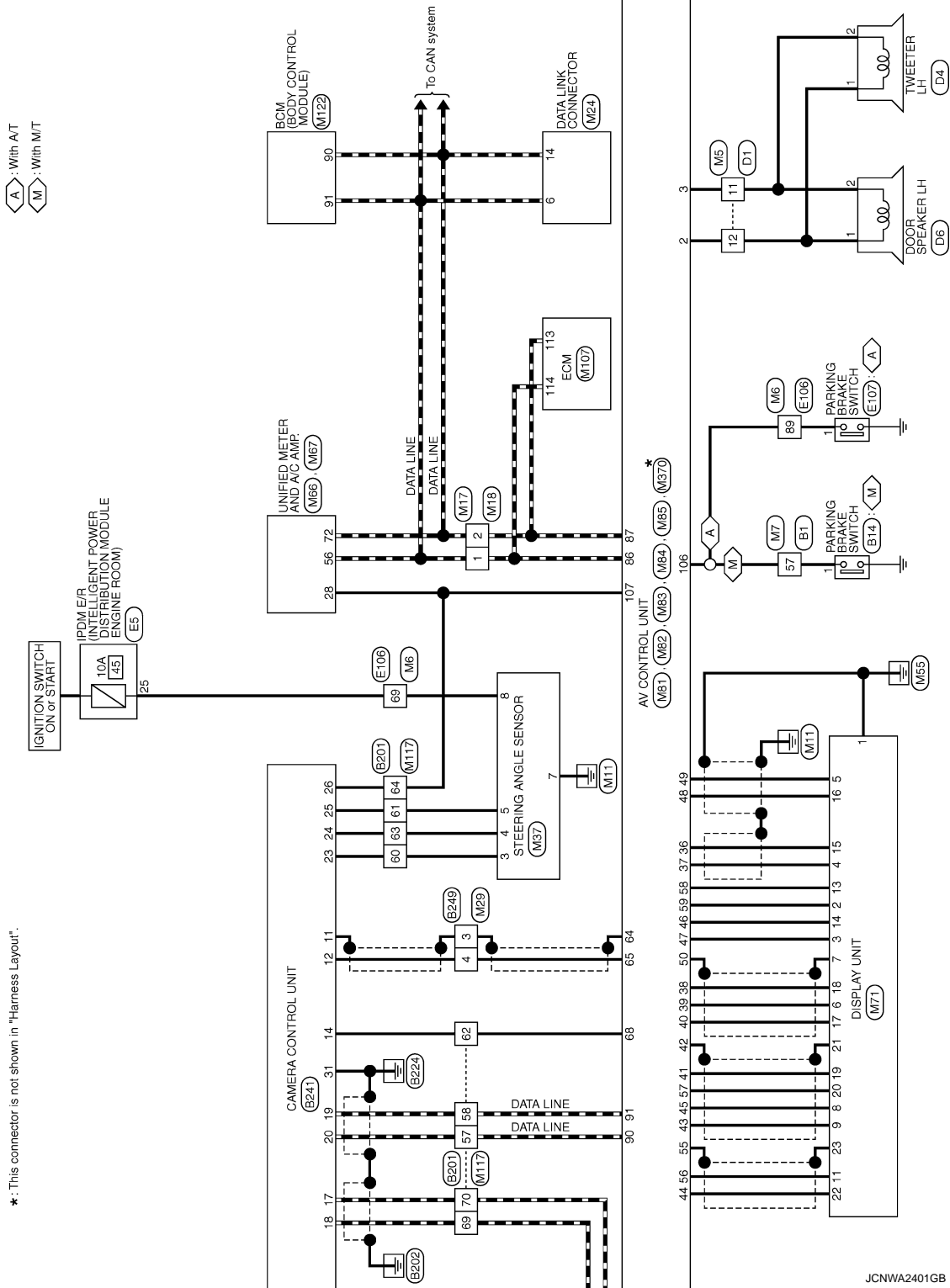
A  
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AV

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]



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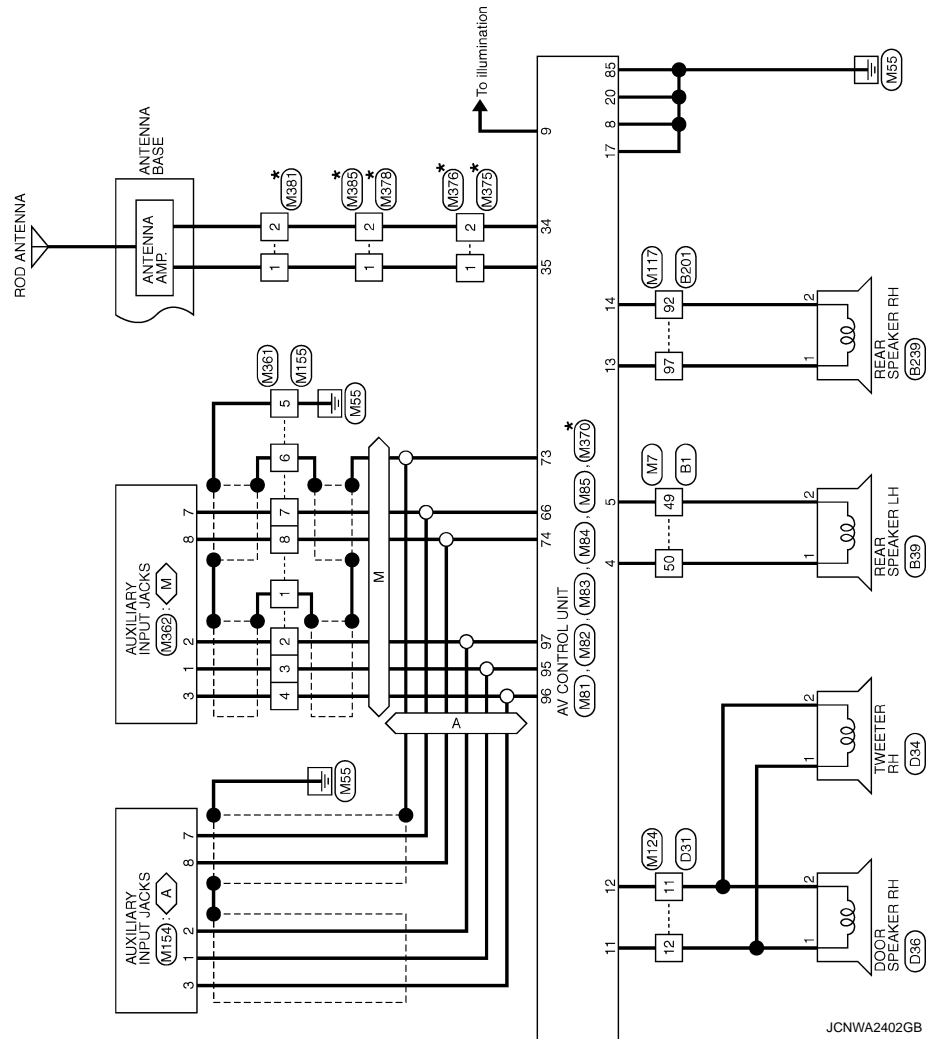
# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

**A** : With A/T  
**M** : With M/T

\* : This connector is not shown in "Harness Layout".



JCNWA2402GB

A  
B  
C  
D  
E  
F  
G  
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I  
J  
K  
L  
M  
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O  
P

AV

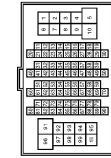
# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
48	Y	- [Without BOSE system]
50	LG	- [Without BOSE system]
57	V	-
61	O	-

Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	P01EB-A



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

Connector No.	B39
Connector Name	REAR SPEAKER LH
Connector Type	NS30ZFV-CS



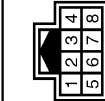
Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	Y	-

Connector No.	B76
Connector Name	WIRE TO WIRE
Connector Type	TH10MW-NH



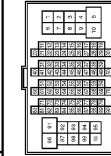
Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH10MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	SHIELD	-

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
57	G	-
58	R	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	V	-
65	SB	-
66	Y	-
68	L	-
70	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
80	G	-
81	R	-
82	W	-
83	B	-
84	SHIELD	-
85	O	-
86	BR	-
87	Y	-
88	SHIELD	-
89	SB	-
90	V	-
92	Y	- [Without BOSE system]
97	LG	- [Without BOSE system]



# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B236
Connector Name	SATELLITE RADIO TUNER
Connector Type	TA16FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	Y	REQUEST (SAT->CONT)
9	O	COMM (SAT->CONT)
10	BR	COMM (CONT->SAT)
12	SB	BATTERY
15	B	GND

16	Y	ACC
----	---	-----

Connector No.	B239
Connector Name	REAR SPEAKER RH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	
2	Y	

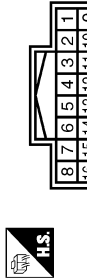
Connector No.	B241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH02FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (R)
19	R	AV COMM (L)
20	G	AV COMM (R)

22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	O	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (8-PULSE)
30	SB	ACC
31	B	GND
32	Y	BATTERY

Connector No.	B246
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	
10	SHIELD	
11	B	
12	W	
13	R	

Connector No.	B249
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	
4	W	

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A  
B  
C  
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E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P


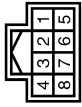







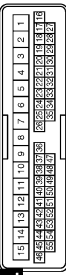





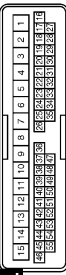
AV

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>B309</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40PW-NH</td></tr> </table>  	Connector No.	B309	Connector Name	WIRE TO WIRE	Connector Type	TH40PW-NH	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> <tr><td>Color of Wire</td><td>R</td><td>W</td><td>Y</td><td>SHIELD</td></tr> <tr><td>Signal Name [Specification]</td><td></td><td></td><td></td><td></td></tr> </table>	Terminal No.	1	2	3	4	Color of Wire	R	W	Y	SHIELD	Signal Name [Specification]				
Connector No.	B309																					
Connector Name	WIRE TO WIRE																					
Connector Type	TH40PW-NH																					
Terminal No.	1	2	3	4																		
Color of Wire	R	W	Y	SHIELD																		
Signal Name [Specification]																						
<table border="1"> <tr><td>Connector No.</td><td>B311</td></tr> <tr><td>Connector Name</td><td>REAR VIEW CAMERA</td></tr> <tr><td>Connector Type</td><td>TH04MW-NH</td></tr> </table>  	Connector No.	B311	Connector Name	REAR VIEW CAMERA	Connector Type	TH04MW-NH	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> <tr><td>Color of Wire</td><td>R</td><td>W</td><td>Y</td><td>SHIELD</td></tr> <tr><td>Signal Name [Specification]</td><td>CAMERA ON SIGNAL</td><td>GND</td><td>CAMERA IMAGE SIGNAL</td><td>SHIELD</td></tr> </table>	Terminal No.	1	2	3	4	Color of Wire	R	W	Y	SHIELD	Signal Name [Specification]	CAMERA ON SIGNAL	GND	CAMERA IMAGE SIGNAL	SHIELD
Connector No.	B311																					
Connector Name	REAR VIEW CAMERA																					
Connector Type	TH04MW-NH																					
Terminal No.	1	2	3	4																		
Color of Wire	R	W	Y	SHIELD																		
Signal Name [Specification]	CAMERA ON SIGNAL	GND	CAMERA IMAGE SIGNAL	SHIELD																		
<table border="1"> <tr><td>Connector No.</td><td>B482</td></tr> <tr><td>Connector Name</td><td>SATELLITE RADIO TUNER</td></tr> <tr><td>Connector Type</td><td>FAKRA</td></tr> </table>  	Connector No.	B482	Connector Name	SATELLITE RADIO TUNER	Connector Type	FAKRA	<table border="1"> <tr><td>Terminal No.</td><td>33</td><td>34</td></tr> <tr><td>Color of Wire</td><td></td><td>SHIELD</td></tr> <tr><td>Signal Name [Specification]</td><td>SATELLITE ANTENNA</td><td>SHIELD</td></tr> </table>	Terminal No.	33	34	Color of Wire		SHIELD	Signal Name [Specification]	SATELLITE ANTENNA	SHIELD						
Connector No.	B482																					
Connector Name	SATELLITE RADIO TUNER																					
Connector Type	FAKRA																					
Terminal No.	33	34																				
Color of Wire		SHIELD																				
Signal Name [Specification]	SATELLITE ANTENNA	SHIELD																				
<table border="1"> <tr><td>Connector No.</td><td>B483</td></tr> <tr><td>Connector Name</td><td>ANTENNA BASE</td></tr> <tr><td>Connector Type</td><td>GTI-6C-1PP-1U</td></tr> </table>  	Connector No.	B483	Connector Name	ANTENNA BASE	Connector Type	GTI-6C-1PP-1U	<table border="1"> <tr><td>Terminal No.</td><td>3</td><td>4</td></tr> <tr><td>Color of Wire</td><td></td><td>SHIELD</td></tr> <tr><td>Signal Name [Specification]</td><td></td><td></td></tr> </table>	Terminal No.	3	4	Color of Wire		SHIELD	Signal Name [Specification]								
Connector No.	B483																					
Connector Name	ANTENNA BASE																					
Connector Type	GTI-6C-1PP-1U																					
Terminal No.	3	4																				
Color of Wire		SHIELD																				
Signal Name [Specification]																						
<table border="1"> <tr><td>Connector No.</td><td>D1</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40PW-CS15</td></tr> </table>  	Connector No.	D1	Connector Name	WIRE TO WIRE	Connector Type	TH40PW-CS15	<table border="1"> <tr><td>Terminal No.</td><td>12</td></tr> <tr><td>Color of Wire</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Terminal No.	12	Color of Wire	L	Signal Name [Specification]										
Connector No.	D1																					
Connector Name	WIRE TO WIRE																					
Connector Type	TH40PW-CS15																					
Terminal No.	12																					
Color of Wire	L																					
Signal Name [Specification]																						
<table border="1"> <tr><td>Connector No.</td><td>D4</td></tr> <tr><td>Connector Name</td><td>TWEETER LH</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table>  	Connector No.	D4	Connector Name	TWEETER LH	Connector Type	TK02FBR	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td></td><td></td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	Signal Name [Specification]								
Connector No.	D4																					
Connector Name	TWEETER LH																					
Connector Type	TK02FBR																					
Terminal No.	1	2																				
Color of Wire	L	W																				
Signal Name [Specification]																						
<table border="1"> <tr><td>Connector No.</td><td>D6</td></tr> <tr><td>Connector Name</td><td>DOOR SPEAKER LH</td></tr> <tr><td>Connector Type</td><td>NS02FW-CS</td></tr> </table>  	Connector No.	D6	Connector Name	DOOR SPEAKER LH	Connector Type	NS02FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td></td><td></td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	Signal Name [Specification]								
Connector No.	D6																					
Connector Name	DOOR SPEAKER LH																					
Connector Type	NS02FW-CS																					
Terminal No.	1	2																				
Color of Wire	L	W																				
Signal Name [Specification]																						
<table border="1"> <tr><td>Connector No.</td><td>D31</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40PW-CS15</td></tr> </table>  	Connector No.	D31	Connector Name	WIRE TO WIRE	Connector Type	TH40PW-CS15	<table border="1"> <tr><td>Terminal No.</td><td>11</td><td>12</td></tr> <tr><td>Color of Wire</td><td>W</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td></td><td></td></tr> </table>	Terminal No.	11	12	Color of Wire	W	L	Signal Name [Specification]								
Connector No.	D31																					
Connector Name	WIRE TO WIRE																					
Connector Type	TH40PW-CS15																					
Terminal No.	11	12																				
Color of Wire	W	L																				
Signal Name [Specification]																						

JCNWA2405GB

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	D34
Connector Name	TWEETER RH
Connector Type	TK02BR



Terminal No.	1	2
Color of Wire	L	W
Signal Name [Specification]		

Connector No.	D36
Connector Name	DOOR SPEAKER RH
Connector Type	NS02FW-CS



Terminal No.	1	2
Color of Wire	L	W
Signal Name [Specification]		

Connector No.	E5
Connector Name	HOME INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20FW-CS/2-M4-1V



Terminal No.	25
Color of Wire	G
Signal Name [Specification]	

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS/6-TM4



Terminal No.	6	89	89
Color of Wire	Y	W	O
Signal Name [Specification]			

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH (WITH A/T)
Connector Type	TB01FW



Terminal No.	1
Color of Wire	O
Signal Name [Specification]	

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



Terminal No.	7
Color of Wire	R
Signal Name [Specification]	

Connector No.	F56
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02FB



Terminal No.	1	2
Color of Wire	R	O
Signal Name [Specification]		

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10



Terminal No.	30	31	41
Color of Wire	R	R	O
Signal Name [Specification]			

A  
B  
C  
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E  
F  
G  
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I  
J  
K  
L  
M  
AV  
O  
P

# CAMERA CONTROL UNIT

[BASE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

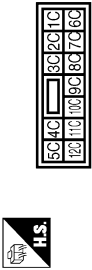
Connector No.	F157
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG



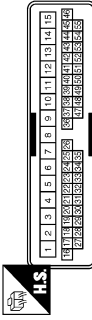
Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS08FW-M2



Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-GS15



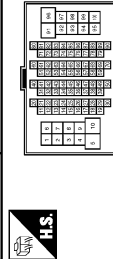
Terminal No.	7	Color of Wire	L	Signal Name [Specification]	REV LAMP RLY
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Terminal No.	2A	Color of Wire	G	Signal Name [Specification]	
	5A	Color of Wire	L	Signal Name [Specification]	

Terminal No.	12C	Color of Wire	R	Signal Name [Specification]	
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Terminal No.	11	Color of Wire	W	Signal Name [Specification]	
	12	Color of Wire	L	Signal Name [Specification]	

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH60MW-CS16-TM4



Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



Terminal No.	6	Color of Wire	Y	Signal Name [Specification]	
	69	Color of Wire	G	Signal Name [Specification]	
	89	Color of Wire	O	Signal Name [Specification]	

Terminal No.	49	Color of Wire	SB	Signal Name [Specification]	
	50	Color of Wire	LG	Signal Name [Specification]	- [Without BOSE system]
	57	Color of Wire	O	Signal Name [Specification]	- [Without BOSE system]
	61	Color of Wire	O	Signal Name [Specification]	

Terminal No.	1	Color of Wire	L	Signal Name [Specification]	
	2	Color of Wire	P	Signal Name [Specification]	

Terminal No.	1	Color of Wire	L	Signal Name [Specification]	
	2	Color of Wire	P	Signal Name [Specification]	



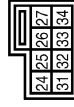
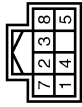
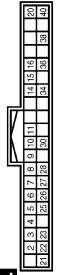
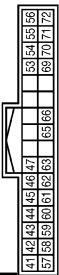
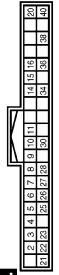

JCNWA2407GB

# CAMERA CONTROL UNIT

[BASE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>M24</td></tr> <tr><td>Connector Name</td><td>DATA LINK CONNECTOR</td></tr> <tr><td>Connector Type</td><td>BD16FW</td></tr> </table> 	Connector No.	M24	Connector Name	DATA LINK CONNECTOR	Connector Type	BD16FW	<table border="1"> <tr><td>Terminal No.</td><td>6</td></tr> <tr><td>Color of Wire</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>14</td></tr> <tr><td>Color of Wire</td><td>P</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Terminal No.	6	Color of Wire	L	Signal Name [Specification]		Terminal No.	14	Color of Wire	P	Signal Name [Specification]																			
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Connector Type	BD16FW																																				
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<table border="1"> <tr><td>Connector No.</td><td>M29</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH04MW-NH</td></tr> </table> 	Connector No.	M29	Connector Name	WIRE TO WIRE	Connector Type	TH04MW-NH	<table border="1"> <tr><td>Terminal No.</td><td>3</td></tr> <tr><td>Color of Wire</td><td>SHIELD</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>4</td></tr> <tr><td>Color of Wire</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Terminal No.	3	Color of Wire	SHIELD	Signal Name [Specification]		Terminal No.	4	Color of Wire	W	Signal Name [Specification]																			
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Terminal No.	8																																				
Color of Wire	G																																				
Signal Name [Specification]	IGN																																				
<table border="1"> <tr><td>Connector No.</td><td>M66</td></tr> <tr><td>Connector Name</td><td>UNIFIED METER AND A/C AMP.</td></tr> <tr><td>Connector Type</td><td>TH04FW-NH</td></tr> </table> 	Connector No.	M66	Connector Name	UNIFIED METER AND A/C AMP.	Connector Type	TH04FW-NH	<table border="1"> <tr><td>Terminal No.</td><td>28</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td>VEHICLE SPEED (6-FULSE)</td></tr> </table>	Terminal No.	28	Color of Wire	R	Signal Name [Specification]	VEHICLE SPEED (6-FULSE)																								
Connector No.	M66																																				
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Signal Name [Specification]	VEHICLE SPEED (6-FULSE)																																				
<table border="1"> <tr><td>Connector No.</td><td>M67</td></tr> <tr><td>Connector Name</td><td>UNIFIED METER AND A/C AMP.</td></tr> <tr><td>Connector Type</td><td>TH02FW-NH</td></tr> </table> 	Connector No.	M67	Connector Name	UNIFIED METER AND A/C AMP.	Connector Type	TH02FW-NH	<table border="1"> <tr><td>Terminal No.</td><td>56</td></tr> <tr><td>Color of Wire</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td>CAN-H</td></tr> <tr><td>Terminal No.</td><td>72</td></tr> <tr><td>Color of Wire</td><td>P</td></tr> <tr><td>Signal Name [Specification]</td><td>CAN-L</td></tr> </table>	Terminal No.	56	Color of Wire	L	Signal Name [Specification]	CAN-H	Terminal No.	72	Color of Wire	P	Signal Name [Specification]	CAN-L																		
Connector No.	M67																																				
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<table border="1"> <tr><td>Connector No.</td><td>M68</td></tr> <tr><td>Connector Name</td><td>UNIFIED METER AND A/C AMP.</td></tr> <tr><td>Connector Type</td><td>TH04FW-NH</td></tr> </table> 	Connector No.	M68	Connector Name	UNIFIED METER AND A/C AMP.	Connector Type	TH04FW-NH	<table border="1"> <tr><td>Terminal No.</td><td>28</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td>VEHICLE SPEED (6-FULSE)</td></tr> </table>	Terminal No.	28	Color of Wire	R	Signal Name [Specification]	VEHICLE SPEED (6-FULSE)																								
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Signal Name [Specification]	VEHICLE SPEED (6-FULSE)																																				
<table border="1"> <tr><td>Connector No.</td><td>M69</td></tr> <tr><td>Connector Name</td><td>BACK-UP LAMP RELAY</td></tr> <tr><td>Connector Type</td><td>MS02FL-M2-LC</td></tr> </table> 	Connector No.	M69	Connector Name	BACK-UP LAMP RELAY	Connector Type	MS02FL-M2-LC	<table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>3</td></tr> <tr><td>Color of Wire</td><td>LG</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>5</td></tr> <tr><td>Color of Wire</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Terminal No.	1	Color of Wire	R	Signal Name [Specification]		Terminal No.	2	Color of Wire	W	Signal Name [Specification]		Terminal No.	3	Color of Wire	LG	Signal Name [Specification]		Terminal No.	5	Color of Wire	O	Signal Name [Specification]							
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Connector Type	MS02FL-M2-LC																																				
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Signal Name [Specification]																																					
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Color of Wire	W																																				
Signal Name [Specification]																																					
Terminal No.	3																																				
Color of Wire	LG																																				
Signal Name [Specification]																																					
Terminal No.	5																																				
Color of Wire	O																																				
Signal Name [Specification]																																					

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A  
B  
C  
D  
E  
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H  
I  
J  
K  
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AV  
O  
P

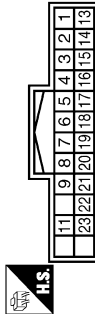
# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	O	ACC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
11	P	COMM (CONT->DISP)
13	BR	INVERTER GND

Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-CS2

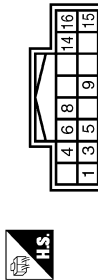


Terminal No.	Color of Wire	Signal Name [Specification]
2	L	FRONT DOOR SPEAKER LH (+)
3	W	FRONT DOOR SPEAKER LH (-)
4	LG	REAR SPEAKER LH (+)
5	SB	REAR SPEAKER LH (-)
6	P	STRG SW A
7	V	ACC
8	B	GND
9	I	ILLUMINATION
11	BR	FRONT DOOR SPEAKER RH (+)
12	SB	FRONT DOOR SPEAKER RH (-)
13	L	REAR SPEAKER RH (+)

Terminal No.	Color of Wire	Signal Name [Specification]
14	LG	SIGNAL GND
15	SR	COMPOSITE IMAGE SIGNAL
16	BR	COMPOSITE SYNC
17	G	RGB (RED) SIGNAL
18	P	RGB (BLUE) SIGNAL
19	W	RGB SYNC
20	G	VP
21	SHIELD	SHIELD
22	L	COMM (DISP->CONT)
23	SHIELD	SHIELD

Terminal No.	Color of Wire	Signal Name [Specification]
14	P	REAR SPEAKER RH (-)
15	B	STRG SW GND
16	L	STRG SW B
17	B	GND
19	Y	BATTERY
20	B	GND

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH116FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	ACC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M82
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	JA12FW



Terminal No.	Color of Wire	Signal Name [Specification]
21	W	SOUND SIGNAL LH (-)
22	B	SOUND SIGNAL LH (+)
23	R	SOUND SIGNAL RH (-)
24	G	SOUND SIGNAL RH (+)
25	SHIELD	SHIELD
26	SHIELD	SHIELD
28	P	REQUEST (SAT->CONT)
29	G	COMM (SAT->CONT)
30	L	COMM (CONT->SAT)

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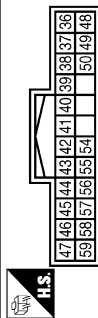
# CAMERA CONTROL UNIT

[BASE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



47	O	SIGNAL VCC
48	BR	COMPOSITE SYNC
49	Y	SHIELD
50	SHIELD	SHIELD
51	SHIELD	SHIELD
56	P	COMM (CONT->DISP)
57	G	VP
58	BR	INVERTER GND
59	Y	INVERTER VCC

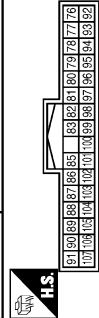
Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (BLUE) SIGNAL
39	L	RGB (GREEN) SIGNAL
40	G	RGB (RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (VS) SIGNAL
44	L	COMM (DISP->CONT)
45	R	HP
46	LG	SIGNAL GND

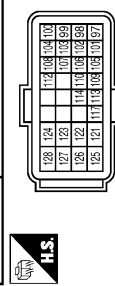
Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	GR	CAMERA CONNECTION RECOGNITION
73	B	SHIELD
74	R	AUX IMAGE GND

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH22FW-NH



103	SB	DISK EJECT SIGNAL
104	G	IGNITION
105	O	REVERSE
106	SB	PARKING BRAKE
107	GR	VEHICLE SPEED (8-PULSE)

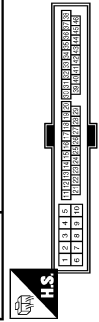
Connector No.	M107
Connector Name	ECM
Connector Type	FR24FGY-R2S-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	L	AV COMM (H) (Without BOSE system)
89	P	AV COMM (L) (Without BOSE system)
90	V	AV COMM (H) (Without BOSE system)
91	LG	AV COMM (L) (Without BOSE system)
95	R	AUX SOUND SIGNAL RH (4)
96	W	AUX SOUND SIGNAL LH (4)
97	B	AUX SOUND SIGNAL LH (6)
101	BR	SIV GND

Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

JCNWA2410GB

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

AV

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BASE AUDIO WITHOUT NAVIGATION]

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
57	V	-
58	LG	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	P	-
65	SB	-
66	Y	-
69	L	-
70	P	-

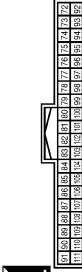
Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)
Connector Type	A05FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

80	W	-
81	B	-
82	R	-
83	G	-
84	SHIELD	-
85	G	-
86	L	-
87	P	-
88	SHIELD	-
89	Y	-
90	W	-
92	P	-
97	L	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



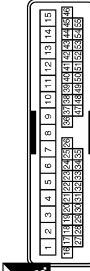
Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	-	-
15	-	-
17	-	-

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-GS15



Terminal No.	Color of Wire	Signal Name [Specification]
11	SB	-
12	BR	-

Connector No.	M361
Connector Name	WIRE TO WIRE
Connector Type	TH080MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R	-
4	W	-
5	SHIELD	-
6	SHIELD	-
7	G	-
8	R	-

JCNWA2411GB



# CAMERA CONTROL UNIT

[BASE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

## BASE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M376
Connector Name	AUXILIARY INPUT JACKS (WITH M/T)
Connector Type	20PFW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M370
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	GT13SH-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
34	-	AM-FM MAIN
35	-	ANTENNA AMP. ON SIGNAL

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SSN-1/1P-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SSN-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M381
Connector Name	ANTENNA BASE
Connector Type	GT13SSN-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP. ON SIGNAL
2	-	AM-FM MAIN

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# MULTI AV SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## SYMPTOM DIAGNOSIS

### MULTI AV SYSTEM SYMPTOMS

#### Symptom Table

INFOID:000000004371540

#### OPERATION

Symptoms	Check items	Possible malfunction location / Action to take
Multifunction switch and preset switch operation does not work.	<ul style="list-style-type: none"> <li>All switches cannot be operated.</li> <li>"MULTI AV" is displayed with CONSULT-III.</li> </ul>	<ul style="list-style-type: none"> <li>Multifunction switch power supply and ground circuit.</li> <li>AV communication circuits between AV control unit and multifunction switch.</li> </ul> Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-34, "CONSULT - III Function (MULTI AV)"</a> .
	<ul style="list-style-type: none"> <li>All switches cannot be operated.</li> <li>"MULTI AV" is not displayed on system selection screen the CONSULT-III is initialized.</li> </ul>	AV control unit power supply and ground circuit malfunction. Refer to <a href="#">AV-48, "AV CONTROL UNIT : Diagnosis Procedure"</a> .
	Only specified switch cannot be operated.	Multifunction switch or preset switch malfunction. Perform multifunction switch and preset switch self-diagnosis function. Refer to <a href="#">AV-25, "Diagnosis Description"</a> .

#### RELATED TO CAMERA

Symptoms	Check items	Probable malfunction location / Action to take
It cannot be switched to rear view monitor even when the selector lever is in the reverse position.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-34, "CONSULT - III Function (MULTI AV)"</a> .
	There is not malfunction in the CONSULT-III self-diagnosis result.	Reverse signal circuit malfunction.(AV control unit)
Camera image is not shown.	AUX images are normal.	<ul style="list-style-type: none"> <li>Rear view camera power supply circuit malfunction.</li> <li>Camera image signal circuit malfunction between camera control unit and AV control unit.</li> </ul> Refer to <a href="#">AV-63, "Diagnosis Procedure"</a> .
	AUX images are not displayed.	Composite image signal circuit malfunction.
Possible route line is indicated abnormally when camera image is displayed.	"Steer. Angle Sensor" turns ON at "Confirmation/Adjustment" of on board diagnosis item "Camera Cont." turns ON.	Sensor signal 3 circuit malfunction. Refer to <a href="#">AV-70, "Diagnosis Procedure"</a> .
	"Steer. Angle Sensor" turns ON at "Confirmation/Adjustment" of on board diagnosis item "Camera Cont." does not turns ON.	<ul style="list-style-type: none"> <li>Sensor signal 1 circuit. Refer to <a href="#">AV-68, "Diagnosis Procedure"</a>.</li> <li>Sensor signal 2 circuit. Refer to <a href="#">AV-68, "Diagnosis Procedure"</a>.</li> </ul>
Camera image is rolling.	AUX image is rolling	<ul style="list-style-type: none"> <li>Horizontal synchronizing (HP) signal circuit malfunction. Refer to <a href="#">AV-57, "Diagnosis Procedure"</a>.</li> <li>Vertical synchronizing (VP) signal circuit malfunction. Refer to <a href="#">AV-58, "Diagnosis Procedure"</a>.</li> </ul>

#### RELATED TO RGB IMAGE

# MULTI AV SYSTEM SYMPTOMS

[BASE AUDIO WITHOUT NAVIGATION]

< SYMPTOM DIAGNOSIS >

Trouble diagnosis chart by symptom

Symptoms	Check items	Possible malfunction location / Action to take
RGB image is not shown.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-34, "CONSULT - III Function (MULTI AV)".</a>
	There is no malfunction in CONSULT-III self-diagnosis results.	Vertical synchronizing (VP) signal circuit. Refer to <a href="#">AV-58, "Diagnosis Procedure".</a>
Color of RGB image is not proper.	Light blue (Cyan) tint.	RGB signal (R: red) circuit. Refer to <a href="#">AV-52, "Diagnosis Procedure".</a>
	Purple (Magenta) tint.	RGB signal (G: green) circuit. Refer to <a href="#">AV-53, "Diagnosis Procedure".</a>
	Screen looks yellowish.	RGB signal (B: blue) circuit. Refer to <a href="#">AV-54, "Diagnosis Procedure".</a>
RGB screen is rolling.	—	RGB synchronizing signal circuit. Refer to <a href="#">AV-55, "Diagnosis Procedure".</a>
Fuel economy display is malfunctioning.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-34, "CONSULT - III Function (MULTI AV)".</a>
	There is no malfunction in CONSULT-III self-diagnosis results.	Ignition signal circuit malfunction. Refer to <a href="#">AV-48, "AV CONTROL UNIT : Diagnosis Procedure".</a>

## RELATED TO AUDIO

Trouble diagnosis chart by symptom

Symptoms	Check items	Possible malfunction location / Action to take
The CD cannot be removed.	—	Disk eject signal circuit. Refer to <a href="#">AV-64, "Diagnosis Procedure".</a>
Audio sound is not heard.	No sound from all speakers.	AV control unit malfunction. Refer to <a href="#">AV-154, "Exploded View".</a>
	Sound is not heard only from the specific places (RH front, RH rear, LH front and LH rear).	Sound signal circuit of malfunctioning system.
Satellite radio is not received.	"ANTENNA" is not displayed even when the channel is turned to 0 in Satellite radio mode.	Perform the following inspection procedure. 1. Check satellite radio antenna mounting nut for looseness. <b>NOTE:</b> Tightening torque: 6.5 N·m (0.66 kg·m, 58 in·lb.) 2. Visually check for satellite radio antenna feeder. 3. Replace the satellite radio antenna (antenna base). Refer to <a href="#">AV-159, "Exploded View".</a> 4. Replace the satellite radio tuner. Refer to <a href="#">AV-160, "Exploded View".</a>
	"ANTENNA" is displayed when the channel is turned to 0 in Satellite radio mode.	Perform the following inspection procedure. 1. Check the connection between satellite radio tuner and antenna feeder. 2. Check the connection between satellite radio antenna (antenna base) and antenna feeder. 3. Check Antenna feeder for open circuit. 4. Replace the satellite radio antenna (antenna base). Refer to <a href="#">AV-159, "Exploded View".</a> 5. Replace the satellite radio tuner. Refer to <a href="#">AV-160, "Exploded View".</a>
The sound of Satellite radio is not heard.	Other audio sounds are normal.	Satellite radio sound signal circuit malfunction between satellite radio tuner and AV control unit.
It does not change to Satellite radio mode.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-34, "CONSULT - III Function (MULTI AV)".</a>
AM/FM radio is not received.	Other audio sounds are normal.	<ul style="list-style-type: none"> <li>Antenna amp. ON signal circuit.</li> <li>Antenna feeder.</li> </ul>

## RELATED TO STEERING SWITCH

# MULTI AV SYSTEM SYMPTOMS

[BASE AUDIO WITHOUT NAVIGATION]

< SYMPTOM DIAGNOSIS >

Trouble diagnosis chart by symptom

Symptoms	Inspection location / Probable malfunction location
None of the steering switch operations work.	Steering switch signal GND circuit. Refer to <a href="#">AV-76, "Diagnosis Procedure"</a> .
Only specified switch cannot be operated.	Steering switch. Refer to <a href="#">AV-163, "Exploded View"</a> .
"SOURCE", "MENU UP", "MENU DOWN" switches of steering switch are not operated.	Steering switch signal A circuit. Refer to <a href="#">AV-72, "Diagnosis Procedure"</a> .
"VOL UP", "VOL DOWN" switches of steering switch are not operated.	Steering switch signal B circuit. Refer to <a href="#">AV-74, "Diagnosis Procedure"</a> .

## RELATED TO AUXILIARY INPUT

### NOTE:

Check that there is no malfunction of AUX equipment main body before performing a diagnosis.

Trouble diagnosis chart by symptom

Symptoms	Check items	Probable malfunction location
No voice sound is heard when AUX mode is selected.	Voice sound is heard when other modes are selected.	AUX sound signal circuits malfunction between auxiliary input jacks and AV control unit.
Image is not displayed when AUX mode is selected.	Camera image is normal.	<ul style="list-style-type: none"> <li>AUX image signal circuit malfunction. Refer to <a href="#">AV-59, "Diagnosis Procedure"</a>.</li> <li>Horizontal synchronizing (HP) signal circuit malfunction. Refer to <a href="#">AV-57, "Diagnosis Procedure"</a>.</li> <li>RGB area (YS) signal circuit malfunction. Refer to <a href="#">AV-56, "Diagnosis Procedure"</a>.</li> </ul>
	Camera image is not displayed.	Composite image signal circuit malfunction.
It does not change from AUX mode to other modes.	—	Vertical synchronizing (VP) signal circuit malfunction. Refer to <a href="#">AV-58, "Diagnosis Procedure"</a> .

# NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

## NORMAL OPERATING CONDITION

### Description

INFOID:000000004371541

### BASIC OPERATIONS

Symptom	Possible cause	Possible solution
No image is displayed.	The brightness is at the lowest setting.	Adjust the brightness of the display.
	The system in the video mode.	Push <b>&lt;DISC&gt;</b> to change the mode.
	The display is turned off.	Push <b>&lt;Day/Night&gt;</b> to turn on the display.
Screen not clear.	Contrast setting is not appropriate.	Adjust the contrast of the display.
The screen is too dim. The movement is slow.	The temperature in the interior of the vehicle is low.	Wait until the interior of the vehicle has warmed up.
Some pixels in the display are darker or brighter than others.	This condition is an inherent characteristic of liquid crystal displays.	This is not a malfunction.
Some menu items cannot be selected.	Some menu items become unavailable while the vehicle is driven.	Park the vehicle in a safe location, and then operate the multi AV system.

### RELATED TO AUDIO

- The majority of the audio malfunctions are the result of outside causes (bad CD/cassette, electromagnetic interference, etc.). Check the symptoms below to diagnose the malfunction.
- The vehicle itself can be a source of noise if noise prevention parts or electrical equipment is malfunctioning. Check if noise is caused and/or changed by engine speed, ignition switch turned to each position, and operation of each piece of electrical equipment, and then determine the cause.

**NOTE:**

- CD-R is not guaranteed to play because they can contain compressed audio (MP3, WMA) or could be incorrectly mastered by the customer on a computer.
- Check if the CDs carry the Compact Disc Logo. If not, the disc is not mastered to the “red book” Compact Disc Standard and may not play.

Symptom	Cause and Counter measure
Cannot play	Check if the CD was inserted correctly.
	Check if the CD is scratched or dirty.
	Check if there is condensation inside the player, and if there is, wait until the condensation is gone (about 1 hour) before using the player.
	If there is a temperature increase error, the player will play correctly after it returns to the normal temperature.
	If there is a mixture of music CD files (CD-DA data) and MP3/WMA files on a CD, only the music CD files (CD-DA data) will be played.
	Files with extensions other than “.MP3”, “.WMA”, “.mp3”, or “.wma” cannot be played. In addition, the character codes and number of characters for folder names and file names should be in compliance with the specifications.
	Check if the disc or the file is generated in an irregular format, This may occur depending on the variation or the setting of MP3/WMA writing applications or other text editing applications.
	Check if the finalization process, such as session close and disc close, is done for the disc.
Poor sound quality	Check if the CD is scratched or dirty.
	Check if the CD is protected by copyright.
It takes a relatively long time before the music starts playing.	If there are many folder or file levels on the MP3/WMA CD, or if it is a multisession disc, some time may be required before the music starts playing.
Music cuts off or skips	The writing software and hardware combination might not match, or the writing speed, writing depth, writing width might not match the specifications. Try using the slowest writing speed.
Skipping with high bit rate files	Skipping may occur with large quantities if data such as for high bit rate data.

## NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BASE AUDIO WITHOUT NAVIGATION]

Symptom	Cause and Counter measure
Move immediately to the next song when playing	When a non-MP3/WMA file has been given an extension of ".MP3", ".WMA", ".mp3", or ".wma", or when play is prohibited by copyright protection, the player will skip to the next song.
The songs do not play back in the desired order.	The playback order is the order in which the files were written by the software, so the files might not play in the desired order.

Noise resulting from variations in field strength, such as fading noise and multi-path noise, or external noise from trains and other sources, is not a malfunction.

**NOTE:**

- Fading noise: This noise occurs because of variations in the field strength in a narrow range due to mountains or buildings blocking the signal.
- Multi-path noise: This noise results from a time difference between the broadcast waves directly from the station arriving at the antenna and the waves reflected by mountains or buildings.

PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000005156445

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

**WARNING:**

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIR BAG".
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

**WARNING:**

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

Precaution for Battery Service

INFOID:000000005156453

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

Service Procedure Precautions for Models with a Pop-up Roll Bar

INFOID:000000005156446

**WARNING:**

- Risk of passenger injury or death may increase if the pop-up roll bar does not deploy during a roll over collision. In order to reduce the chance of an incident where the pop-up roll bar is inoperative, all maintenance must be performed by a NISSAN or INFINITI dealer.
- Before removing and installing the pop-up roll bar component parts and harness, always turn the ignition switch OFF, disconnect the battery negative terminal, and wait for 3 minutes or more. (The purpose of this operation is to discharge electricity that is accumulated in the auxiliary power supply circuit in the air bag diagnosis sensor unit.)
- When repairing, removing, and installing a pop-up roll bar, always refer to SRS AIR BAG and SRS AIR BAG CONTROL warnings in the Service Manual.

Precaution for Trouble Diagnosis

INFOID:000000004929983

AV COMMUNICATION SYSTEM

- Do not apply voltage of 7.0 V or higher to the measurement terminals.
- Use the tester with its open terminal voltage being 7.0 V or less.
- Be sure to turn ignition switch OFF and disconnect the battery cable from the negative terminal before checking the circuit.

A  
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AV  
O  
P

# PRECAUTIONS

< PRECAUTION >

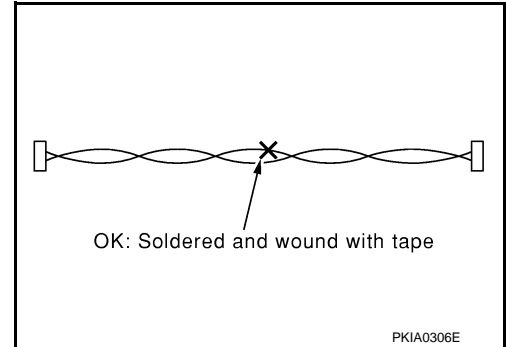
[BASE AUDIO WITHOUT NAVIGATION]

## Precaution for Harness Repair

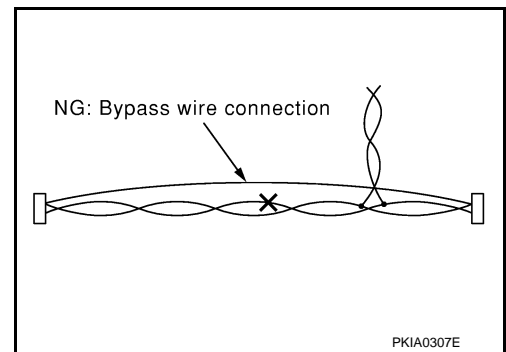
INFOID:000000004929984

### AV COMMUNICATION SYSTEM

- Solder the repaired parts, and wrap with tape. [Frays of twisted line must be within 110 mm (4.33 in).]



- Do not perform bypass wire connections for the repair parts. (The spliced wire will become separated and the characteristics of twisted line will be lost.)





# PREPARATION

< PREPARATION >

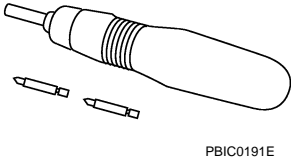
[BASE AUDIO WITHOUT NAVIGATION]

## PREPARATION

### PREPARATION

#### Commercial Service Tools

INFOID:000000004929985

Tool name	Description
<p>Power tool</p>  <p>PBIC0191E</p>	<p>Loosening bolts and nuts</p>

A  
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L  
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AV  
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AV

## AV CONTROL UNIT

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

# REMOVAL AND INSTALLATION

## AV CONTROL UNIT

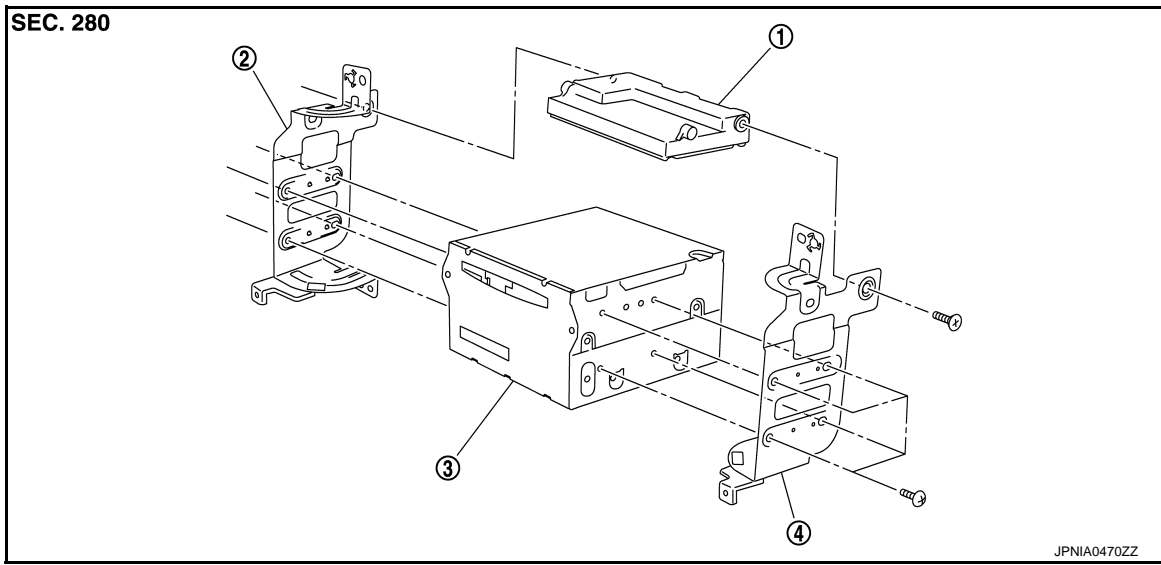
### Exploded View

INFOID:000000004371546

#### REMOVAL

Refer to [IP-12, "Exploded View"](#).

#### DISASSEMBLY



1. Unified meter and A/C amp.
2. Bracket LH
3. AV control unit
4. Bracket RH

## Removal and Installation

INFOID:000000005183751

#### REMOVAL

1. Remove display unit.
2. Remove AV control unit with a unified meter and A/C amp. as a single unit from the body.
3. Remove bracket screws, and then remove AV control unit.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

**Since AV control unit connector and unified meter and A/C amp. connector have the same form, be careful not to insert them wrongly.**

# DISPLAY UNIT

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

## DISPLAY UNIT

### Exploded View

INFOID:000000004930074

Refer to [IP-12, "Exploded View"](#).

### Removal and Installation

INFOID:000000004930075

#### REMOVAL

1. Remove cluster lid D. Refer to [IP-12, "Exploded View"](#).
2. Remove display unit with bracket as a single unit.

#### INSTALLATION

Install in the reverse order of removal.

A  
B  
C  
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O  
P

AV

## DOOR SPEAKER

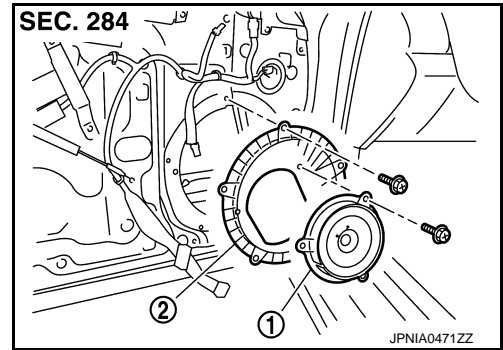
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

### DOOR SPEAKER

#### Exploded View

INFOID:000000004371550



1. Door speaker
2. Speaker bracket

#### Removal and Installation

INFOID:000000004371551

##### REMOVAL

1. Remove door finisher assembly. Refer to [INT-12, "Exploded View"](#).
2. Remove the door speaker from speaker bracket.

##### INSTALLATION

Install in the reverse order of removal.

# REAR SPEAKER

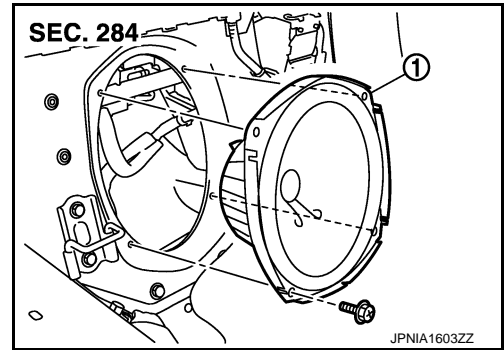
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

## REAR SPEAKER

### Exploded View

INFOID:000000004371552



1. Rear speaker

### Removal and Installation

INFOID:000000004371553

#### REMOVAL

1. Remove rear seatback. Refer to [SE-246. "Exploded View"](#).
2. Remove rear speaker from the vehicle.

#### INSTALLATION

Install in the reverse order of removal.

A  
B  
C  
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G  
H  
I  
J  
K  
L  
M  
O  
P

AV

# TWEETER

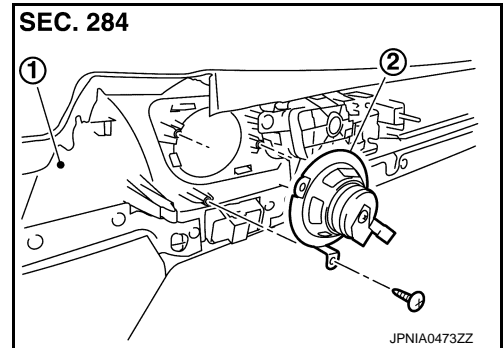
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

## TWEETER

### Exploded View

INFOID:000000004371554



1. Door finisher assembly
2. Tweeter

### Removal and Installation

INFOID:000000004371555

#### REMOVAL

1. Remove door finisher assembly. Refer to [INT-12, "Exploded View"](#).
2. Remove the tweeter from the door finisher assembly.

#### INSTALLATION

Install in the reverse order of removal.

# ANTENNA BASE

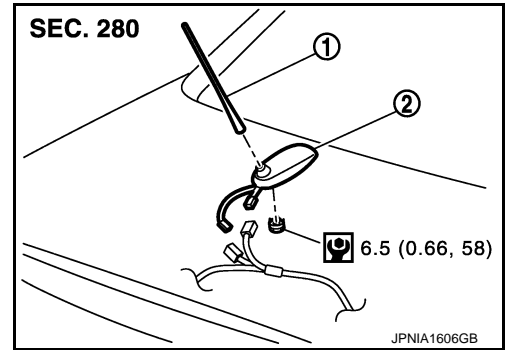
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

## ANTENNA BASE

### Exploded View

INFOID:000000004931956



1. Antenna rod
2. Antenna base

Refer to [GI-4, "Components"](#) for symbols in the figure.

### Removal and Installation

INFOID:000000004931957

#### REMOVAL

1. Remove trunk lid finisher inner. Refer to [INT-26, "Exploded View"](#).
2. Remove antenna base mounting nut.
3. Remove antenna base.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

**Be careful about tightening torque. Antenna sensitivity becomes poor, and when it is excessive, trunk lid panel may be deformed, when antenna base mounting nut tightening torque is loose.**

A  
B  
C  
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L  
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P

AV

# SATELLITE RADIO TUNER

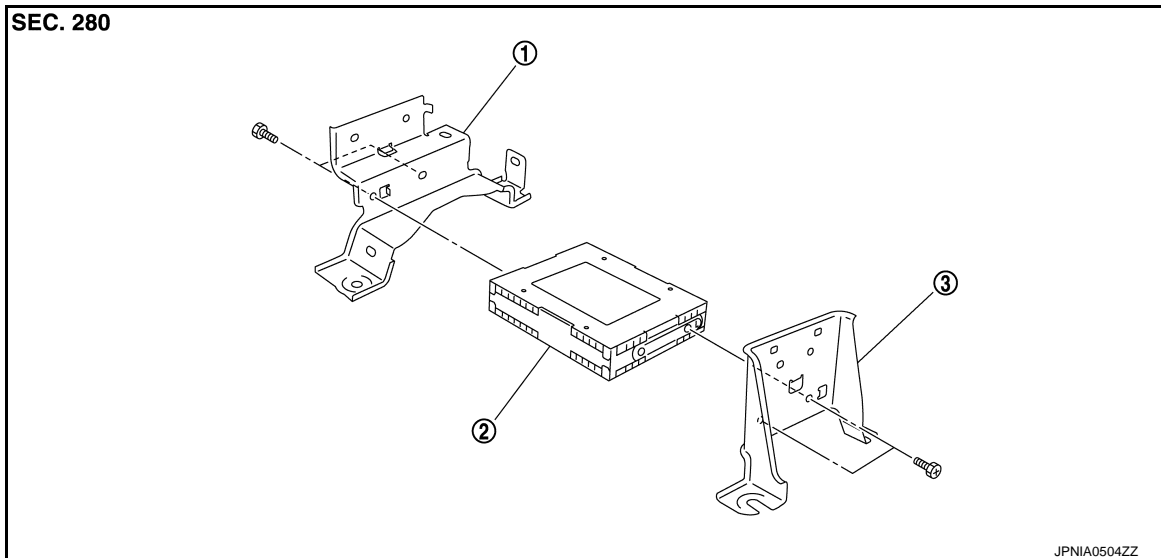
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

## SATELLITE RADIO TUNER

Exploded View

INFOID:000000004371558



1. Bracket (front)

2. Satellite radio tuner

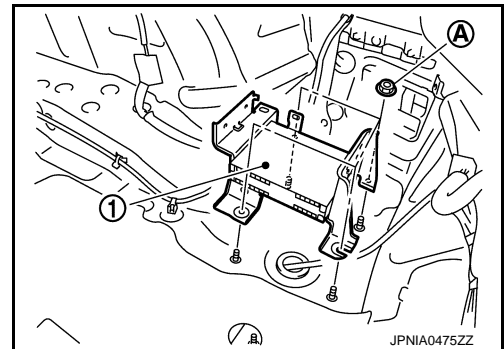
3. Bracket (rear)

## Removal and Installation

INFOID:000000004371559

### REMOVAL

1. Remove trunk floor spacer RH. Refer to [INT-23, "Exploded View"](#).
2. Remove nuts (A) from the trunk room RH, and satellite radio tuner (1) from trunk room side.



### INSTALLATION

Install in the reverse order of removal.



# MULTIFUNCTION SWITCH

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

## MULTIFUNCTION SWITCH

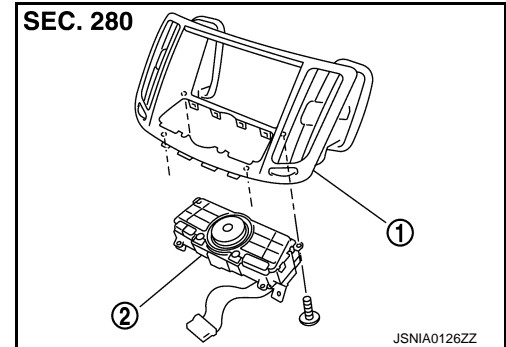
### Exploded View

INFOID:000000004930076

#### REMOVAL

Refer to [IP-12, "Exploded View"](#).

#### DISASSEMBLY



1. Center ventilator grille
2. Multifunction switch

### Removal and Installation

INFOID:000000004930077

#### REMOVAL

1. Remove cluster lid D. Refer to [IP-12, "Exploded View"](#).
2. Remove multifunction switch with center ventilator grille as a single unit.
3. Remove multifunction switch from center ventilator.

#### INSTALLATION

Install in the reverse order of removal.

A  
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G  
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L  
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AV  
O  
P

# PRESET SWITCH

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

## PRESET SWITCH

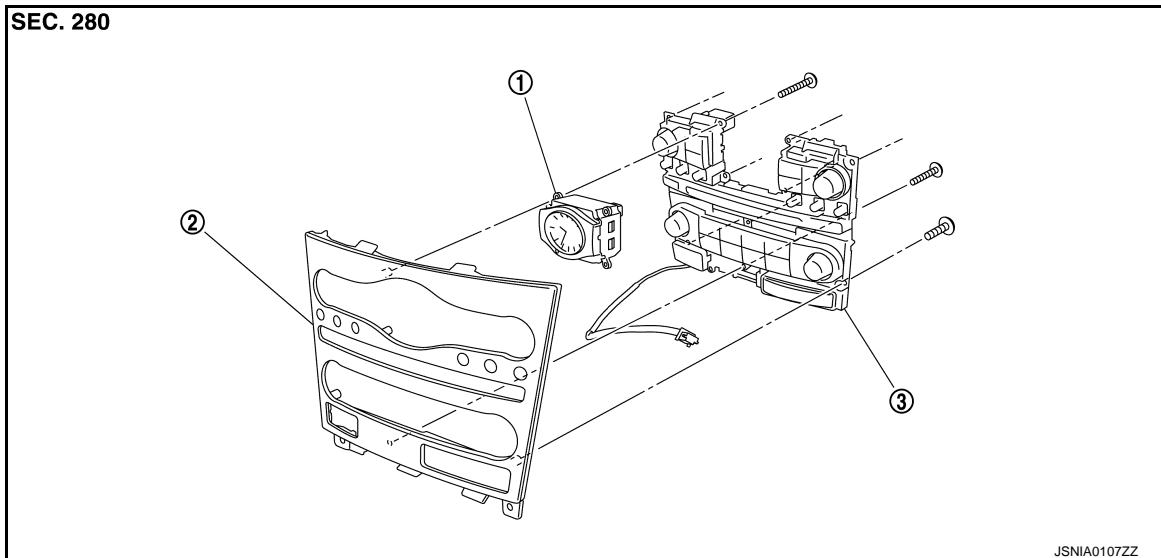
### Exploded View

INFOID:000000004930078

#### REMOVAL

Refer to [IP-12. "Exploded View"](#).

#### DISASSEMBLY



1. Clock

2. Cluster lid C

3. Preset switch

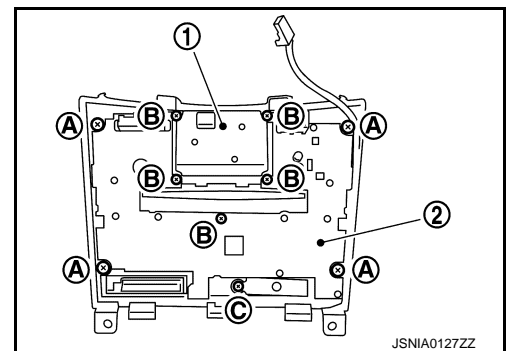
### Removal and Installation

INFOID:000000004930079

#### REMOVAL

1. Remove cluster lid C. Refer to [IP-12. "Exploded View"](#).
2. Remove preset switch (2) from cluster lid C.

- 1. Clock
- A. Screw
- B. Screw
- C. Screw



#### INSTALLATION

Install in the reverse order of removal.

#### NOTE:

When installing preset switch, do not allow the print wire that connects preset switch and multifunction switch to get caught in between AV control unit and preset switch.

# STEERING SWITCH

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

## STEERING SWITCH

### Exploded View

INFOID:000000004932173

Refer to [ST-13. "Exploded View"](#).

### Removal and Installation

INFOID:000000004932174

#### REMOVAL

Refer to [ST-13. "Removal and Installation"](#).

#### INSTALLATION

Install in the reverse order of removal.

A

B

C

D

E

F

G

H

I

J

K

L

M

AV

O

P

## AUXILIARY INPUT JACKS

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

### AUXILIARY INPUT JACKS

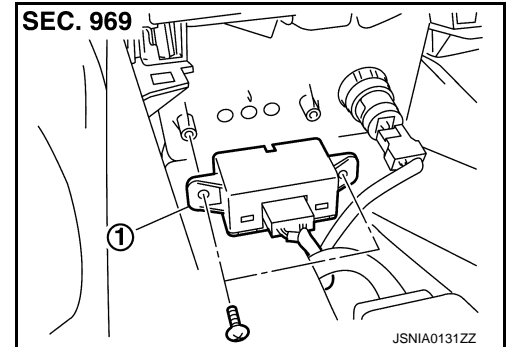
#### Exploded View

INFOID:000000004931969

#### REMOVAL

Refer to [IP-24, "Exploded View"](#).

#### DISASSEMBLY



1. Auxiliary input jacks

#### Removal and Installation

INFOID:000000004931970

#### REMOVAL

1. Remove center console assembly. Refer to [IP-24, "Exploded View"](#).
2. Remove auxiliary input jacks from center console assembly.

#### INSTALLATION

Install in the reverse order of removal.

# CAMERA CONTROL UNIT

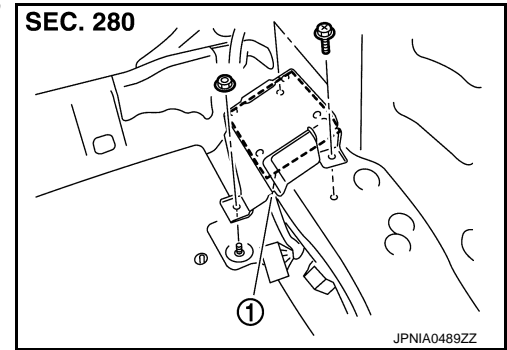
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

## CAMERA CONTROL UNIT

### Exploded View

INFOID:000000004931960



1. Camera control unit

### Removal and Installation

INFOID:000000004931961

#### REMOVAL

1. Remove trunk floor spacer RH, and then remove camera control unit. Refer to [INT-23. "Exploded View"](#).

#### INSTALLATION

Install in the reverse order of removal.

### Adjustment

INFOID:000000004931962

#### ADJUSTMENT

There may be a misalignment of possible route line center position of rear view monitor after removing camera control unit. Therefore, correct neutral position with the following procedure.

1. Steer the steering wheel to the leftmost and rightmost ends.
2. Drive vehicle at 30 km/h (18.6 MPH) min. speed at least 100 m (328.1 ft).

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AV

# REAR VIEW CAMERA

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

## REAR VIEW CAMERA

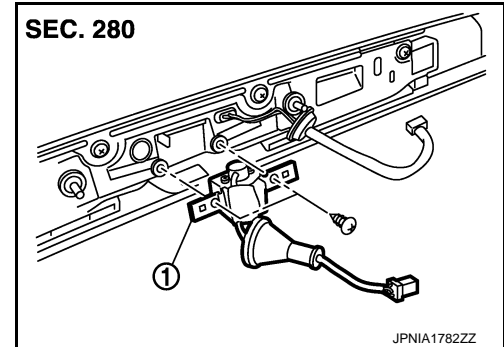
### Exploded View

INFOID:000000004931963

#### REMOVAL

Refer to [EXT-36, "Exploded View"](#).

#### DISASSEMBLY



1. Rear view camera

### Removal and Installation

INFOID:000000004931964

#### REMOVAL

1. Remove trunk lid finisher outer. Refer to [EXT-36, "Exploded View"](#).
2. Remove rear view camera from trunk lid finisher outer.

#### INSTALLATION

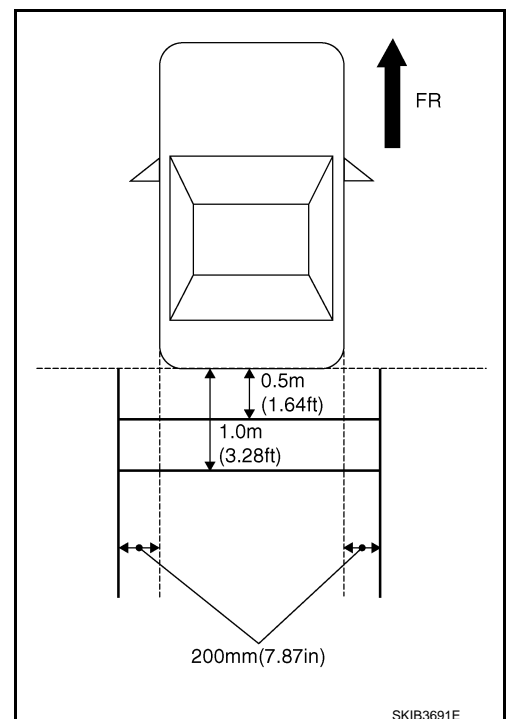
Install in the reverse order of removal.

### Adjustment

INFOID:000000004931965

Adjust the guide line position if the guide line position is shifted after installing the rear view camera.

1. Draw lines on rearward area of the vehicle passing through the following points: 200 mm (7.87 in) from both sides of the vehicle, and 0.5 m (1.64 ft), 1.0 m (3.28 ft) from the rear end of the bumper.
2. Set into "Adjust offset of rear view camera" mode of Confirmation / Adjustment mode.



# REAR VIEW CAMERA

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

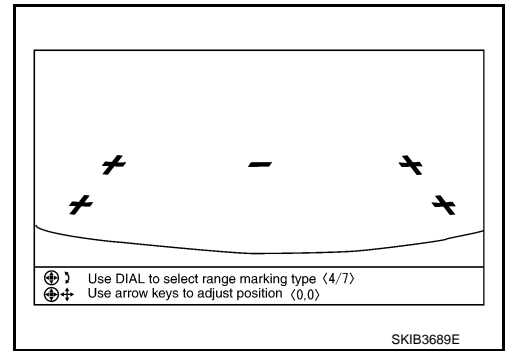
3. Rotate the center dial, and then select the guiding line pattern so that its angle is aligned with the correction line of the rear of the vehicle.

**Selected pattern : 7**

4. Make fine adjustment to the correction line of the rear of the vehicle with up/down/left/right switches so that its position is aligned with the guiding line. Press "OK" switch and record the adjusted guiding line position to the camera control unit.

**Up/Down adjustment range : -20 - 20**

**Left/Right adjustment range : -20 - 20**



### CAUTION:

Never operate other function such as pressing BACK while writing index data.

If Confirmation/Adjustment mode does not function in the above procedure, perform one of the following service to adjust the index again.

- Remove battery for five min. Then reconnect battery.
- Remove camera control unit connector for five min. Then reconnect camera control unit connector.

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AV

# STEERING ANGLE SENSOR

< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

## STEERING ANGLE SENSOR

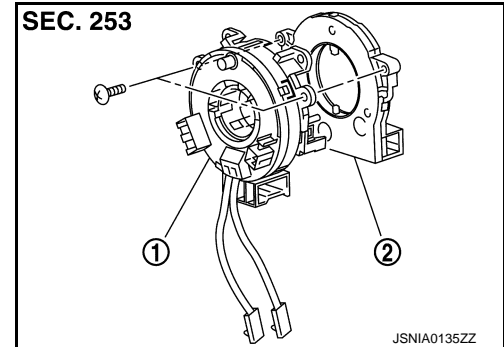
### Exploded View

INFOID:000000004931966

#### REMOVAL

Refer to [SR-14, "Exploded View"](#).

#### DISASSEMBLY



1. Spiral cable
2. Steering angle sensor

### Removal and Installation

INFOID:000000004931967

#### REMOVAL

1. Remove spiral cable.
2. Remove steering angle sensor from spiral cable.

#### INSTALLATION

Install in the reverse order of removal.



# ANTENNA FEEDER (RADIO)

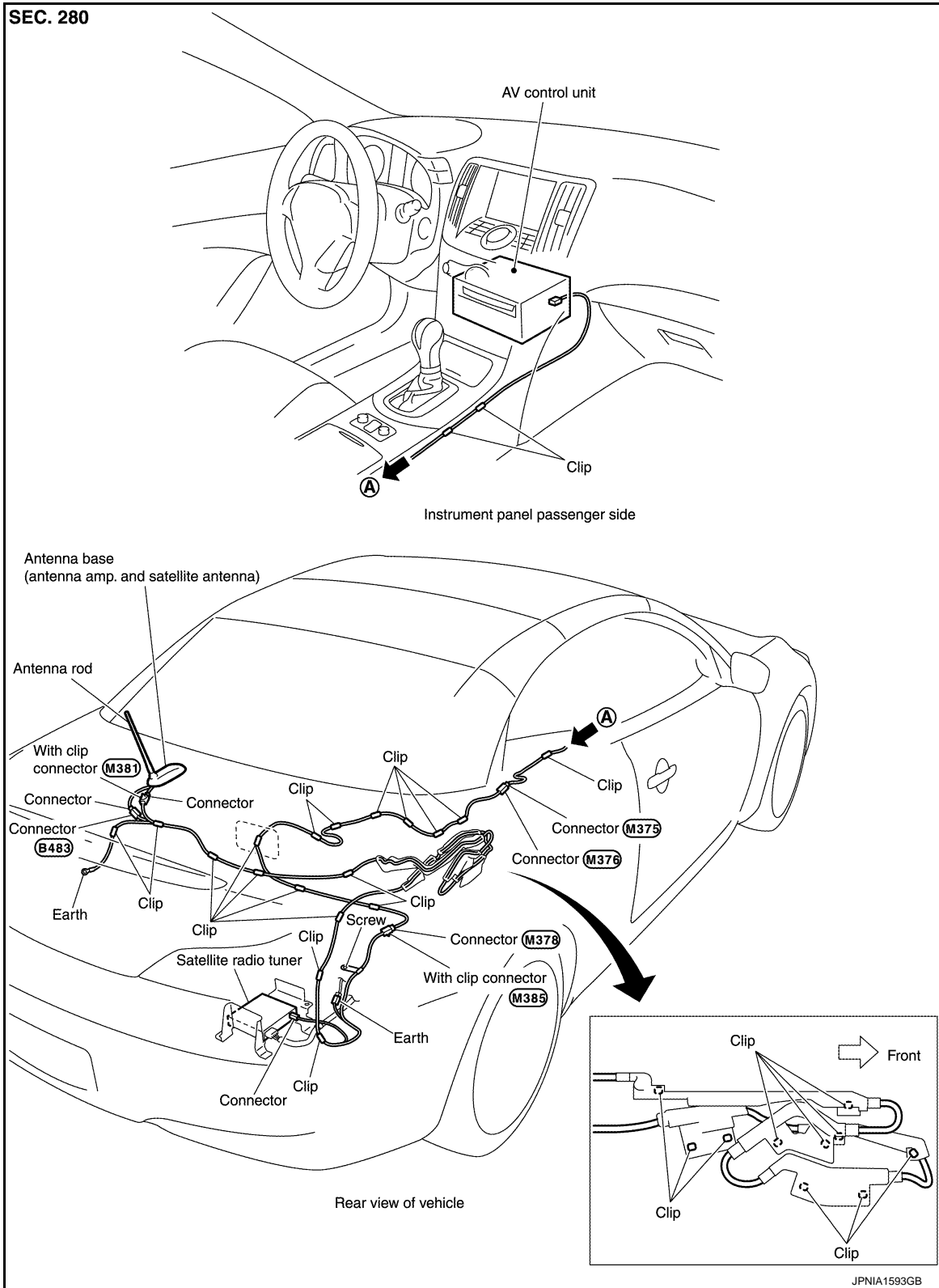
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

## ANTENNA FEEDER (RADIO)

### Harness Layout

INFOID:000000004371570



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AV

# ANTENNA FEEDER (SATELLITE RADIO)

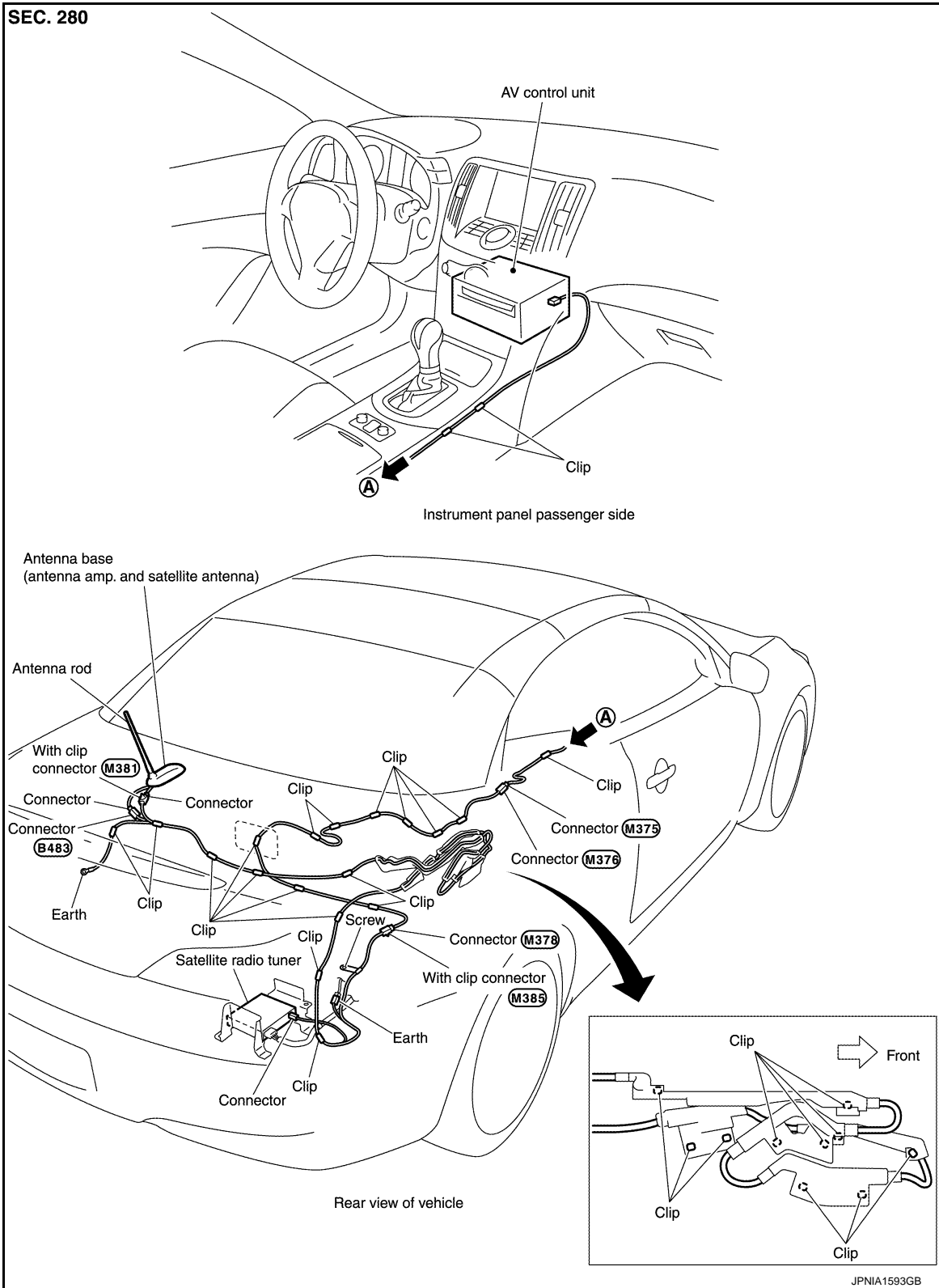
< REMOVAL AND INSTALLATION >

[BASE AUDIO WITHOUT NAVIGATION]

## ANTENNA FEEDER (SATELLITE RADIO)

### Harness Layout

INFOID:000000004930081



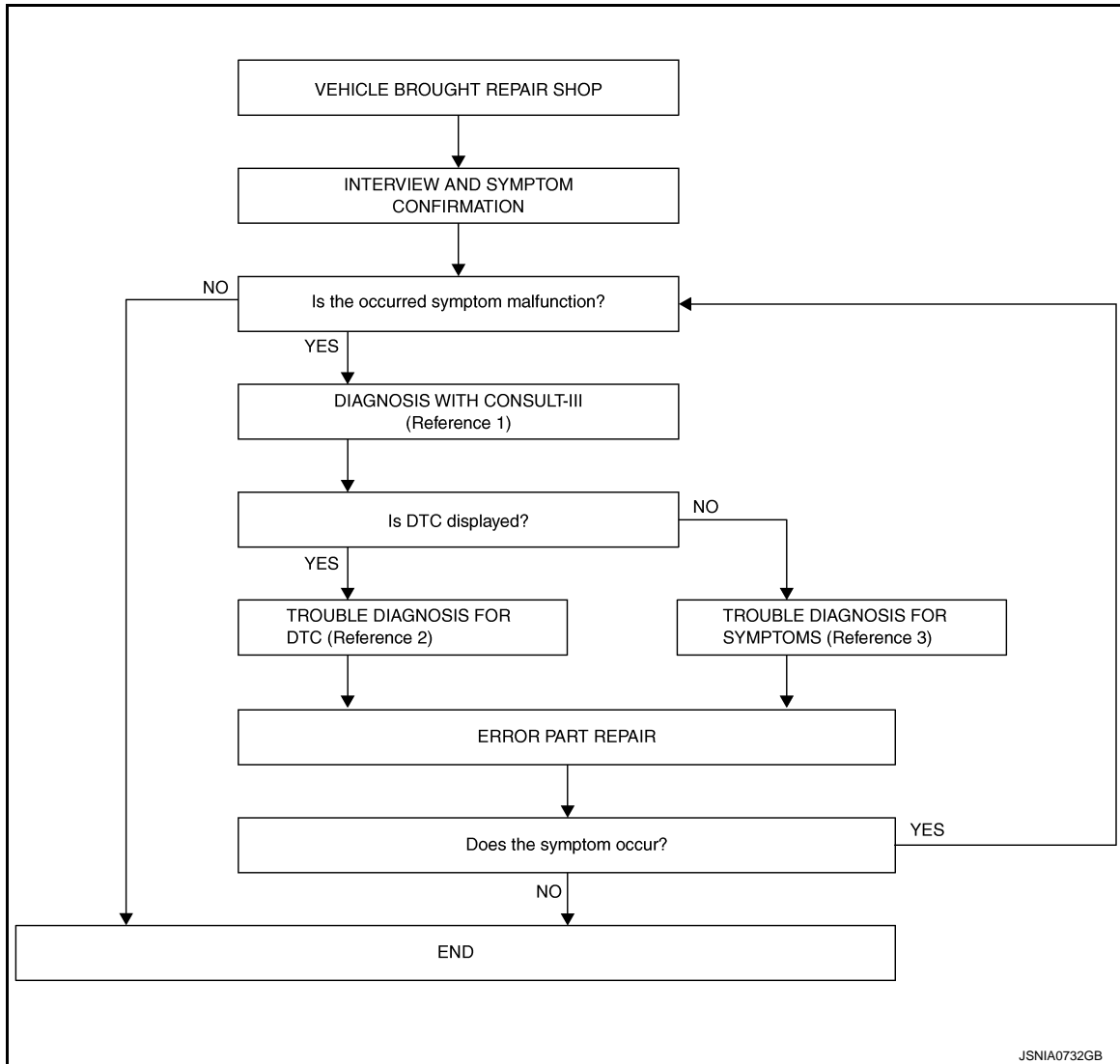
## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORK FLOW

#### Work Flow

INFOID:000000004928930

#### OVERALL SEQUENCE



- Reference 1... Refer to [AV-203. "CONSULT - III Function \(MULTI AV\)".](#)
- Reference 2... Refer to [AV-299. "DTC Index".](#)
- Reference 3... Refer to [AV-444. "Symptom Table".](#)

#### DETAILED FLOW

##### 1. INTERVIEW AND SYMPTOM CONFIRMATION

Check the malfunction symptoms by performing the following items.

- Interview the customer to obtain the malfunction information (conditions and environment when the malfunction occurred).
- Check the symptom.

Is the occurred symptom malfunction?

YES >> GO TO 2.

NO >> INSPECTION END

##### 2. DIAGNOSIS WITH CONSULT-III

# DIAGNOSIS AND REPAIR WORK FLOW

[BOSE AUDIO WITHOUT NAVIGATION]

< BASIC INSPECTION >

1. Connect CONSULT-III and perform a self-diagnosis for "MULTI AV". Refer to [AV-203, "CONSULT - III Function \(MULTI AV\)"](#).

**NOTE:**

Skip to step 4 of the diagnosis procedure if "MULTI AV" is not displayed.

2. Check if any DTC is displayed in the self-diagnosis results.

Is DTC displayed?

YES >> GO TO 3.

NO >> GO TO 4.

## 3. TROUBLE DIAGNOSIS FOR DTC

---

1. Check the DTC indicated in the self-diagnosis results.
2. Perform the relevant diagnosis referring to the DTC Index. Refer to [AV-299, "DTC Index"](#).

>> GO TO 5.

## 4. TROUBLE DIAGNOSIS FOR SYMPTOMS

---

Perform the relevant diagnosis referring to the diagnosis chart by symptom. Refer to [AV-444, "Symptom Table"](#).

>> GO TO 5.

## 5. ERROR PART REPAIR

---

1. Repair or replace the identified malfunctioning parts.
2. Perform a self-diagnosis for "MULTI AV" with CONSULT-III.

**NOTE:**

Erase the stored self-diagnosis results after repairing or replacing the relevant components if any DTC has been indicated in the self-diagnosis results.

3. Check that the symptom does not occur.

Does the symptom occur?

YES >> GO TO 1.

NO >> INSPECTION END

# INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[BOSE AUDIO WITHOUT NAVIGATION]

## INSPECTION AND ADJUSTMENT

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

#### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:000000004928931

Always correct the center position of the rear view monitor's possible route line after disconnecting the battery negative terminal.

#### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:000000004928932

#### 1. CORRECTION OF CENTER POSITION OF REAR VIEW MONITOR'S POSSIBLE ROUTE LINE

Refer to the following for details.

>> Refer to [AV-173, "REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement"](#).

### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

#### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000004928933

When camera control unit is replaced, the center position of rear view monitor possible route line is corrected.

#### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:000000004928934

#### 1. CORRECTION OF CENTER POSITION OF REAR VIEW MONITOR'S POSSIBLE ROUTE LINE

Refer to the following for details.

>> Refer to [AV-173, "REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement"](#).

### REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT

#### REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Description

INFOID:000000004928935

Adjust the center position of the possible route line of the rear view monitor if it is shifted.

#### REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement

INFOID:000000004928936

#### 1. STEERING OPERATION

Steer the steering wheel to the leftmost and rightmost ends.

>> GO TO 2

#### 2. DRIVING

Drive the vehicle straight ahead 100 m (328.1 ft) or more at a speed of 30 km/h (18.6 MPH) or more.

>> END

# MULTI AV SYSTEM

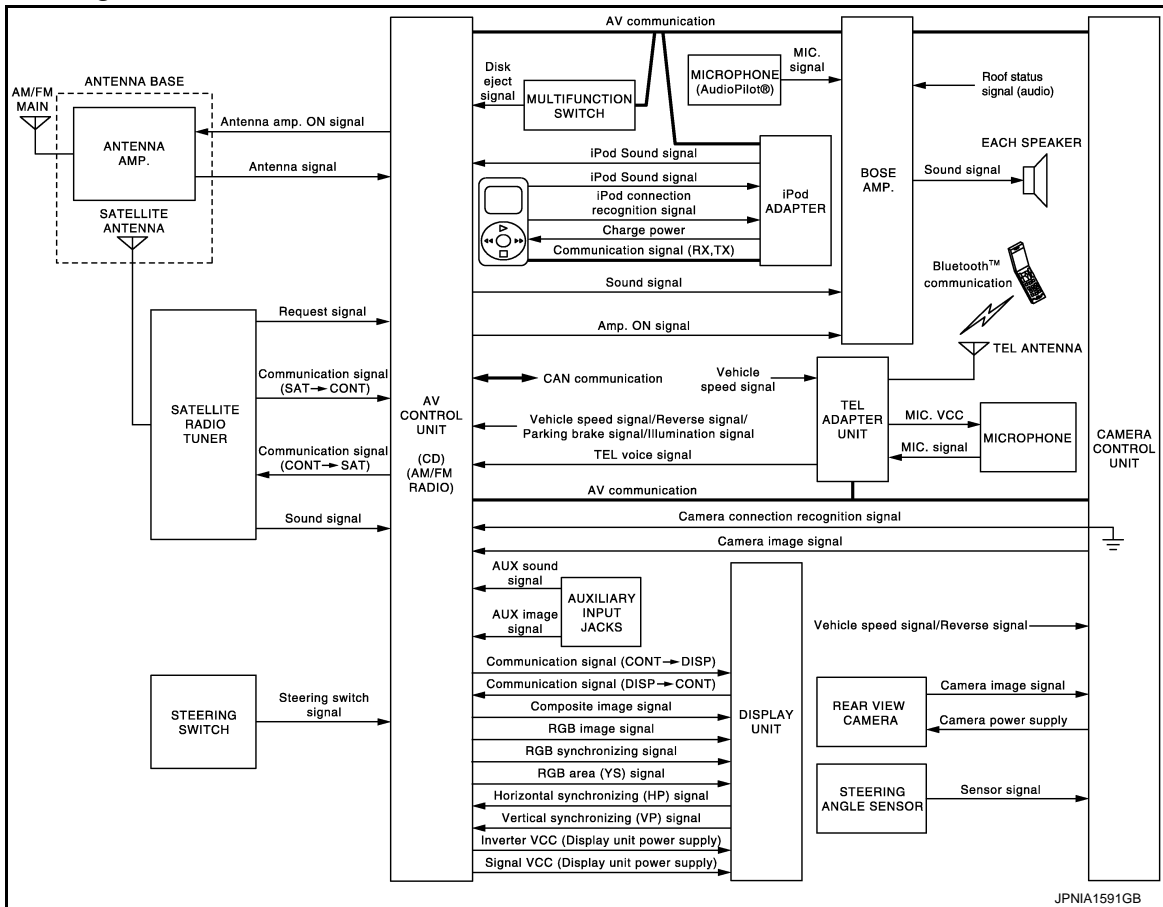
[BOSE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

## SYSTEM DESCRIPTION

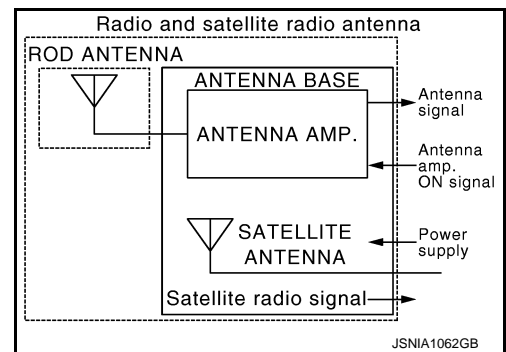
### MULTI AV SYSTEM

#### System Diagram



**NOTE:**

- The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.
- An antenna base integrated with radio antenna and satellite radio antenna is adopted.



#### System Description

Multi AV system means that the following systems are integrated.

System name	System explanation
AUDIO SYSTEM	<a href="#">AV-179. "System Description"</a>
REAR VIEW MONITOR SYSTEM	<a href="#">AV-184. "System Description"</a>

# MULTI AV SYSTEM

[BOSE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

System name	System explanation
VEHICLE INFORMATION SYSTEM	<ul style="list-style-type: none"><li>Indicates the status of audio, climate control system, fuel economy and maintenance.</li><li>AV control unit displays the fuel consumption status while receiving data signal through CAN communication from ECM and unified meter and A/C amp.</li></ul>
HANDS-FREE PHONE SYSTEM	<a href="#">AV-187, "System Description"</a>
SATELLITE RADIO SYSTEM	<a href="#">AV-179, "System Description"</a>
AUXILIARY INPUT SYSTEM	Refer to "AUXILIARY INPUT SYSTEM" shown below.

- AV control unit functions by transmitting/receiving data one by one with each unit (slave unit) that configures them completely as a master unit by connecting between units that configure MULTI AV system with two AV communication lines (H, L).
- Two AV communication lines (H, L) adopt a twisted pair line that is resistant to noise.
- AV control unit is connected by CAN communication, and it receives data signal from ECM, unified meter and A/C amp. It computes and displays fuel economy information value with the obtained information. Transmitting/receiving of data signal is performed by BCM. Also, it transmits the required signal of vehicle setting and receives the response signal.
- AV control unit is connected with display and serial communication, and it transmits the required signal of display and display control and receives the response signal from display. Also, it is connected with satellite radio by serial communication, and it transmits the operating signal and receives the display signal.

## NOTE:

AV control unit can perform CONSULT-III self-operating function and on board self-diagnosis.

- CONSULT-III self-diagnosis: refer to [AV-203, "CONSULT - III Function \(MULTI AV\)"](#).
- On board self-diagnosis: refer to [AV-190, "Diagnosis Description"](#).

On board self-diagnosis of TEL adapter unit can be performed.

- Refer to [AV-208, "Diagnosis Description"](#) for on board self-diagnosis.

## AUXILIARY INPUT SYSTEM

- Image and sound can be output from an external device by connecting a device with auxiliary input jacks.
- Operation can be performed with multifunction switch and steering switch. Multifunction switch transmits operation signal to AV control unit by AV communication.

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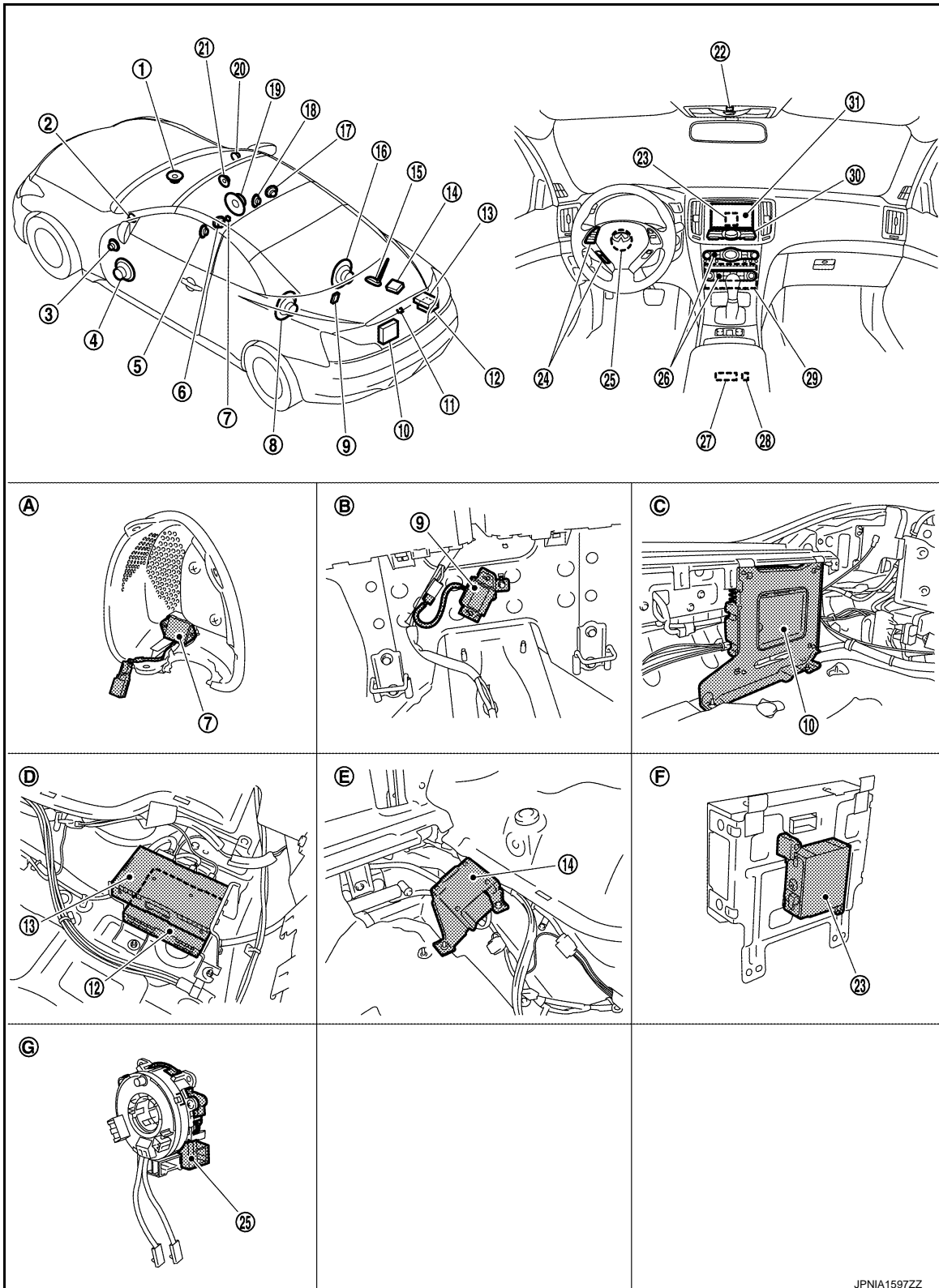
# MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

## Component Parts Location

INFOID:000000004371575



- |                                  |                               |                               |
|----------------------------------|-------------------------------|-------------------------------|
| 1. Center speaker                | 2. Tweeter LH                 | 3. Door squawker LH           |
| 4. Door woofer LH                | 5. Driver headrest speaker LH | 6. Driver headrest speaker RH |
| 7. Microphone (for AudioPilot® ) | 8. Rear woofer LH             | 9. TEL antenna                |
| 10. BOSE amp.                    | 11. Rear view camera          | 12. Satellite radio tuner     |



# MULTI AV SYSTEM

[BOSE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

- |                           |                                   |   |
|---------------------------|-----------------------------------|---|
| 13. TEL adapter unit      | 14. Camera control unit           | 15. Antenna base (antenna amp. and satellite antenna) |
| 16. Rear woofer RH        | 17. Passenger headrest speaker RH | 18. Passenger headrest speaker LH                     |
| 19. Door woofer RH        | 20. Tweeter RH                    | 21. Door squawker RH                                  |
| 22. Microphone            | 23. iPod adapter                  | 24. Steering switch                                   |
| 25. Steering angle sensor | 26. Preset switch                 | 27. Auxiliary input jacks                             |
| 28. iPod connector        | 29. AV control unit               | 30. Multifunction switch                              |
| 31. Display unit          |                                   |   |
- A. Inner grille is removed condition.    B. Rear seat back is removed condition.    C. Trunk rear plate is removed condition.  
D. Trunk room RH    E. Trunk room RH    F. Rear view of the display unit  
G. Spiral cable part

## Component Description

INFOID:000000004371576

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>AV control unit includes audio function and vehicle information function.</li> <li>It is connected to ECM and unified meter and A/C amp via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Auxiliary image signal is input from the auxiliary input jacks.</li> </ul>
DISPLAY UNIT	<ul style="list-style-type: none"> <li>Display image is controlled by the serial communication from AV control unit.</li> <li>RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing).</li> <li>Synchronizing signal (HP, VP) is output to AV control unit.</li> <li>Composite image signal (auxiliary and camera images) is input from the AV control unit.</li> </ul>
BOSE AMP.	Inputs power (amp. ON) and sound signal from AV control unit, and outputs sound signal to each speaker.
DOOR WOOFER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs low-pitched sound.</li> </ul>
DOOR SQUAWKER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs midrange sound.</li> </ul>
TWEETER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs high range sound.</li> </ul>
CENTER SPEAKER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs mid range sounds.</li> </ul>
REAR WOOFER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs low-pitched sound.</li> </ul>
HEADREST SPEAKER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs midrange sound.</li> </ul>
MICROPHONE (for AudioPilot®)	<ul style="list-style-type: none"> <li>Used for AudioPilot®</li> <li>Mic.signal is transmitted to BOSE amp.</li> </ul>
MULTIFUNCTION SWITCH	<ul style="list-style-type: none"> <li>Operation panel is equipped with the centralized switch where audio and auxiliary input operations are integrated.</li> <li>Connected with AV control unit via cable, and operation signal is transmitted to AV control unit via AV communication.</li> </ul>

# MULTI AV SYSTEM

[BOSE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

Part name	Description
PRESET SWITCH	<ul style="list-style-type: none"> <li>• Operation panel is equipped with the centralized switch where audio and air conditioner operations are integrated.</li> <li>• Connected with multifunction switch via cable, and operation signal is transmitted to AV control unit via AV communication.</li> <li>• The CD ejection operating signal is performed by hardwire.</li> </ul>
CAMERA CONTROL UNIT	<ul style="list-style-type: none"> <li>• Camera image signal is input from rear view camera, and camera image is indicated on the display unit via AV control unit.</li> <li>• Power (camera ON signal) is transmitted to rear view camera.</li> <li>• Controlled by AV communication transmitted from AV control unit.</li> <li>• AV control unit recognizes the presence of camera system with camera connection recognition signal.</li> </ul>
REAR VIEW CAMERA	The image of vehicle rear view is transmitted to camera control unit.
STEERING ANGLE SENSOR	Sensor signal (steering angle) is transmitted to camera control unit.
STEERING SWITCH	<ul style="list-style-type: none"> <li>• Operations such as audio and hands-free phone are possible.</li> <li>• Steering switch signal (operation signal) is output to AV control unit.</li> </ul>
MICROPHONE	<ul style="list-style-type: none"> <li>• Used only when hands-free phone is operated.</li> <li>• Outputs Mic. signal (TEL voice signal) to the TEL adapter unit.</li> <li>• The power (Mic. power supply) is supplied from the TEL adapter unit.</li> </ul>
AUXILIARY INPUT JACKS	The image signal of the auxiliary input is output via the AV control unit to the display unit, and it outputs the sound signal to the AV control unit.
ANTENNA BASE	<p>An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.</p> <p>ANTENNA AMP.</p> <ul style="list-style-type: none"> <li>• Radio signal received by rod antenna is amplified and transmitted to AV control unit.</li> <li>• Power (antenna amp. ON signal) is supplied from AV control unit.</li> </ul> <p>SATELLITE RADIO ANTENNA</p> <ul style="list-style-type: none"> <li>• Receives the satellite radio waves and outputs it to AV control unit.</li> </ul>
TEL ADAPTER UNIT	<ul style="list-style-type: none"> <li>• Inputs the TEL voice signal from TEL antenna and outputs it to the AV control unit.</li> <li>• It is connected with the AV control unit via AV communication and controlled with the AV control unit.</li> </ul>
TEL ANTENNA	Receives the TEL voice signal and outputs it to the TEL adapter unit.
SATELLITE RADIO TUNER	<ul style="list-style-type: none"> <li>• Inputs the satellite radio signal from satellite radio antenna and outputs the sound signal to the AV control unit.</li> <li>• It is controlled with the AV control unit and serial communication (communication signal and request signal).</li> </ul>
iPod ADAPTER	<ul style="list-style-type: none"> <li>• Inputs iPod sound signal from iPod®, and outputs iPod sound signal to AV control unit.</li> <li>• Receiving/transmitting of iPod® operation signals are performed as follows: <ul style="list-style-type: none"> <li>- between AV control unit and iPod adapter: AV communication.</li> <li>- between iPod® and iPod adapter: serial communication.</li> </ul> </li> </ul>

iPod® is a trademark of Apple inc., registered in the U.S. and other countries.

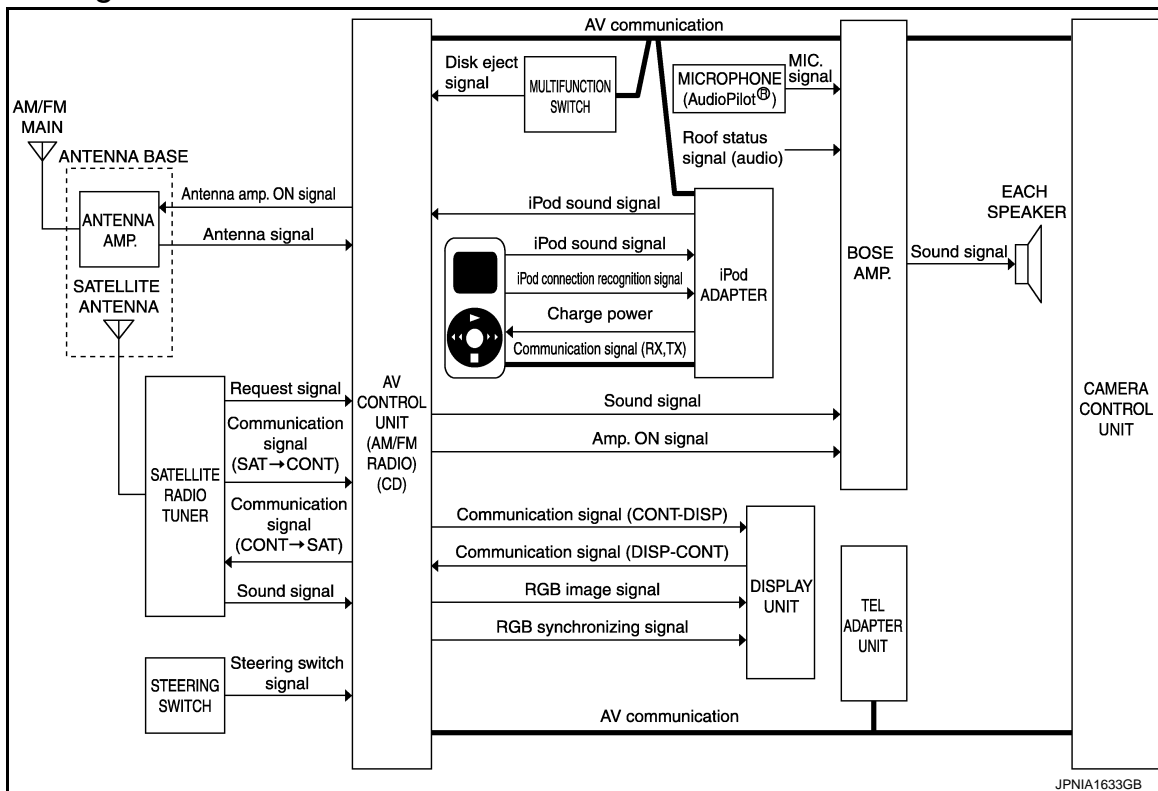
# AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

## AUDIO SYSTEM

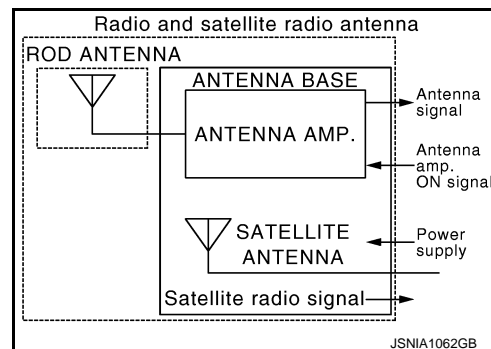
### System Diagram



INFOID:000000004371577

#### NOTE:

- The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.
- An antenna base integrated with radio antenna and satellite radio antenna is adopted.



### System Description

INFOID:000000004371578

The audio system is equipped with the following functions. Each function can be operated with the multifunction switch, preset switch or steering switch. It indicates the operation status of AUDIO to the display.

Function
AM/FM radio
CD
Satellite radio
iPod connection
AudioPilot®
Sound equalizer automatic switching function

### FUNCTION DESCRIPTION

A  
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AV

# AUDIO SYSTEM

## < SYSTEM DESCRIPTION >

## [BOSE AUDIO WITHOUT NAVIGATION]

### Operating Signal

Operation of the audio system can be performed with the multifunction switch, preset switch or steering switch.

- Operating signal is transmitted to AV control unit with AV communication when it is operated by multifunction switch or preset switch. The CD ejection operating signal is performed by hardwire.
- Operating signal is transmitted to AV control unit with steering switch signal when it is operated by steering switch.

### Screen Display

- The display switching of the screen is performed with the communication signal between the display and the AV control unit.
- The image signal to display operating condition is performed with RGB signal, RGB area signal and RGB image synchronizing signal.

### AM/FM Radio Mode

- AM/FM radio tuner is built into AV control unit.
- Audio signal is received by rod antenna, next it is amplified by antenna amp, and finally it is input to AV control unit. Audio signal is input to BOSE amp. and BOSE amp. outputs to each speaker.

### CD Mode (6CDs)

- CD changer (up to 6CDs) is built into AV control unit.
- AV control unit outputs audio signal to BOSE amp. and BOSE amp. outputs to each speaker when CD is inserted to AV control unit.

### Satellite Radio Mode

- Satellite radio tuner is controlled by communication signal and request signal with AV control unit.
- Sound signal (satellite radio) is received by satellite antenna and transmitted to AV control unit. Sound signal (satellite radio) is transmitted from AV control unit to BOSE amp. and transmitted from BOSE amp. to each speaker.

### iPod Connection

- Connect iPod® and iPod adapter with wire harness and iPod adapter input iPod sound signal from iPod®. When iPod mode is selected, iPod adapter output iPod sound signal to AV control unit. AV control unit output sound signal to BOSE amp., and BOSE amp. output sound signal to each speaker.
- Receiving/transmitting of iPod® operation signals are performed as follows:
  - between AV control unit and iPod adapter: AV communication.
  - between iPod® and iPod adapter: serial communication.
- The iPod® connection status can be recognized whether iPod adapter receives iPod connection recognition signal.
- The iPod adapter is possible to charge iPod®.

iPod® is a trademark of Apple inc., registered in the U.S. and other countries.

### AudioPilot®

AudioPilot® is a sound improving system that picks up by a microphone in a driver headrest any noises or the sound of music coming into the vehicle, and that uses the BOSE amp. to revise the frequency feature of music in real time in response to the frequency feature of the noise while driving and listening to music.

- If the low frequency area noise from the vehicle is loud, it adjusts the low frequency element of music to be larger than the vehicle noise.
- If the high frequency area noise from the vehicle is loud, it adjusts the high frequency element of music to be larger than the vehicle noise.
- If the vehicle noise is smaller than the setting volume, correction is not performed. This eliminates the vehicle noise when listening to music.

### Sound Equalizer Automatic Switching Function

Sound quality in a fully-open retractable hard top condition is improved by the correction for bringing the frequency characteristics in a fully-open retractable hard top condition closer to the characteristics in a fully-closed retractable hard top condition. When the retractable hard top is in a fully-open condition, sound pressure is reduced due to the absence of sound echo generated by sound reflection from the retractable hard top. BOSE amp. detects an open-close condition of the retractable hard top by receiving a roof status signal from the retractable hard top control unit and switches the equalizer to correct the frequency characteristics in a fully-open retractable hard top condition. During the switching of the equalizer, audio stops temporarily due to the temporary mute.

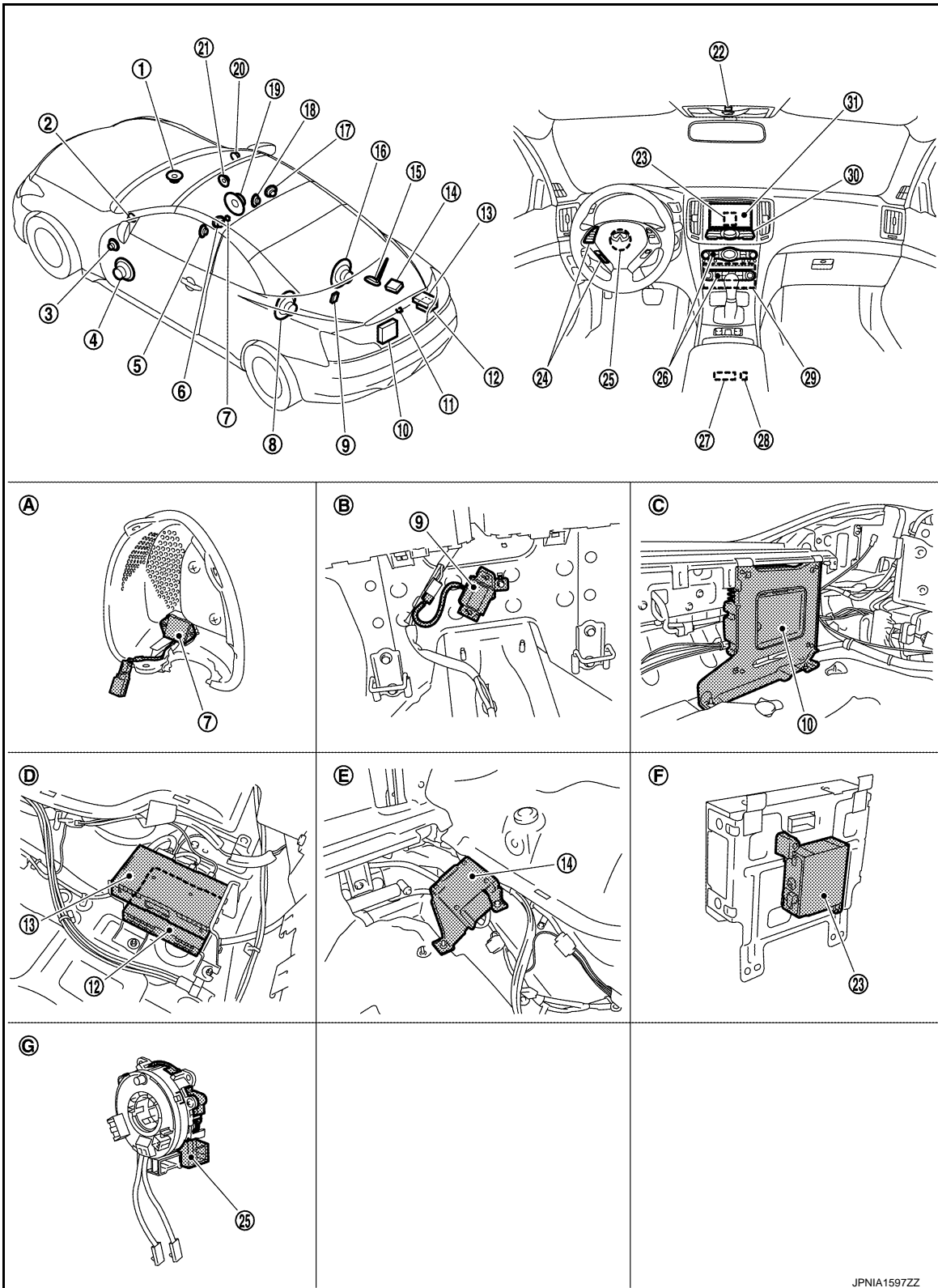
# AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

## Component Parts Location

INFOID:000000004931716



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|---------------------------------|-------------------------------|-------------------------------|
| 1. Center speaker               | 2. Tweeter LH                 | 3. Door squawker LH           |
| 4. Door woofer LH               | 5. Driver headrest speaker LH | 6. Driver headrest speaker RH |
| 7. Microphone (for AudioPilot®) | 8. Rear woofer LH             | 9. TEL antenna                |
| 10. BOSE amp.                   | 11. Rear view camera          | 12. Satellite radio tuner     |

JPNIA1597ZZ

# AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

- |                                       |   |   |
|---------------------------------------|---|---|
| 13. TEL adapter unit                  | 14. Camera control unit                 | 15. Antenna base (antenna amp. and satellite antenna) |
| 16. Rear woofer RH                    | 17. Passenger headrest speaker RH       | 18. Passenger headrest speaker LH                     |
| 19. Door woofer RH                    | 20. Tweeter RH                          | 21. Door squawker RH                                  |
| 22. Microphone                        | 23. iPod adapter                        | 24. Steering switch                                   |
| 25. Steering angle sensor             | 26. Preset switch                       | 27. Auxiliary input jacks                             |
| 28. iPod connector                    | 29. AV control unit                     | 30. Multifunction switch                              |
| 31. Display unit                      |   |   |
| A. Inner grille is removed condition. | B. Rear seat back is removed condition. | C. Trunk rear plate is removed condition.             |
| D. Trunk room RH                      | E. Trunk room RH                        | F. Rear view of the display unit                      |
| G. Spiral cable part                  |   |   |

## Component Description

INFOID:000000004371580

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>• The AM/FM receiving function and the CD playing function are equipped.</li> <li>• Audio signal is output to BOSE amp. from each function.</li> </ul>
DISPLAY UNIT	<ul style="list-style-type: none"> <li>• Display image is controlled by the serial communication from AV control unit.</li> <li>• RGB image signal (audio operation condition) is input from AV control unit.</li> </ul>
BOSE AMP.	<ul style="list-style-type: none"> <li>• Inputs power (amp. ON) and sound signal from AV control unit, and outputs sound signal to each speaker.</li> <li>• Inputs roof status signal (audio) from the retractable hard top control unit.</li> </ul>
DOOR WOOFER	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs low-pitched sound.</li> </ul>
DOOR SQUAWKER	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs midrange sound.</li> </ul>
TWEETER	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs high range sound.</li> </ul>
CENTER SPEAKER	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs mid range sounds.</li> </ul>
REAR WOOFER	<ul style="list-style-type: none"> <li>• Outputs sound signal from woofer amp.</li> <li>• Outputs low-pitched sound.</li> </ul>
HEADREST SPEAKER	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs midrange sound.</li> </ul>
MICROPHONE (for AudioPilot®)	<ul style="list-style-type: none"> <li>• Used for AudioPilot®</li> <li>• Mic.signal is transmitted to BOSE amp.</li> </ul>
MULTIFUNCTION SWITCH	<ul style="list-style-type: none"> <li>• Each audio operation can be operated.</li> <li>• Connected with AV control unit via cable, and operation signal is transmitted to AV control unit via AV communication.</li> </ul>
PRESET SWITCH	<ul style="list-style-type: none"> <li>• Each audio operation can be operated.</li> <li>• It is connected to the multifunction switch by AV communication. The operation signal is transmitted to the AV control unit.</li> <li>• The CD ejection operating signal is performed by hardwire.</li> </ul>
STEERING SWITCH	<ul style="list-style-type: none"> <li>• Each audio operation can be operated.</li> <li>• Steering switch signal (operation signal) is output to AV control unit.</li> </ul>
ANTENNA BASE	<p>An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.</p> <p style="margin-left: 20px;">ANTENNA AMP.</p> <ul style="list-style-type: none"> <li>• Radio signal received by rod antenna is amplified and transmitted to AV control unit.</li> </ul> <p style="margin-left: 20px;">SATELLITE RADIO ANTENNA</p> <ul style="list-style-type: none"> <li>• Receives the satellite radio waves and outputs it to satellite radio tuner.</li> </ul>

# AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

Part name	Description
iPod ADAPTER	<ul style="list-style-type: none"><li>• Inputs iPod sound signal from iPod<sup>®</sup>, and outputs iPod sound signal to AV control unit.</li><li>• Receiving/transmitting of iPod<sup>®</sup> operation signals are performed as follows:<ul style="list-style-type: none"><li>- between AV control unit and iPod adapter: AV communication.</li><li>- between iPod<sup>®</sup> and iPod adapter: serial communication.</li></ul></li></ul>
SATELLITE RADIO TUNER	<ul style="list-style-type: none"><li>• Inputs the satellite radio signal from satellite radio antenna and outputs the sound signal to the AV control unit.</li><li>• It is controlled with the AV control unit and serial communication (communication signal and request signal).</li></ul>

iPod<sup>®</sup> is a trademark of Apple inc., registered in the U.S. and other countries.

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# REAR VIEW MONITOR SYSTEM

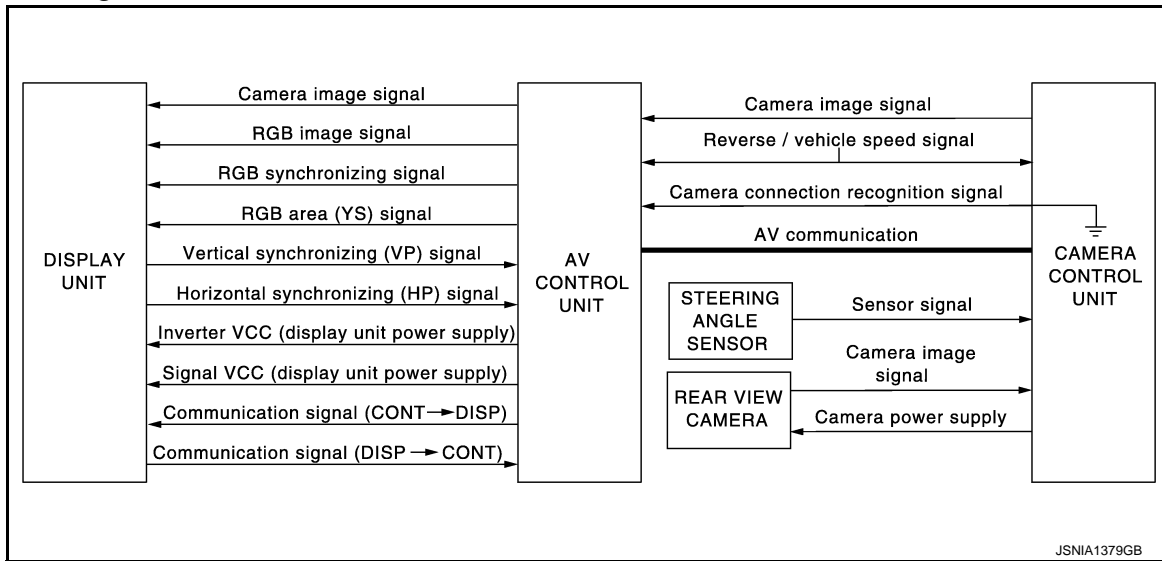
[BOSE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

## REAR VIEW MONITOR SYSTEM

### System Diagram

INFOID:000000004931941



### System Description

INFOID:000000005038915

#### CAMERA IMAGE OPERATION PRINCIPLE

- Power is supplied to rear view camera from camera control unit and outputs camera image signal to camera control unit when selector lever is set to R position and the reverse signal on camera control unit is input.
- Camera control unit superimposes the guiding line and predicted course line to the image from rear view camera and outputs to display unit via AV control unit. In this case, the reverse signal is also input to AV control unit. Therefore, AV control unit recognizes the selector lever as in the reverse position. And then AV control unit switches the image displayed by the communication signal between AV control unit and display unit with the camera image. In addition, possible route lines are controlled by original sensor signal from steering angle sensor.
- The AV control unit determines whether rear view camera is equipped or not, based on the presence of camera connection recognition signal. It switches to rear view monitor image at the time of reverse signal input when it is equipped.
- AV control unit is connected in communication with camera control unit and display unit, and it controls operation of rear view monitor system.



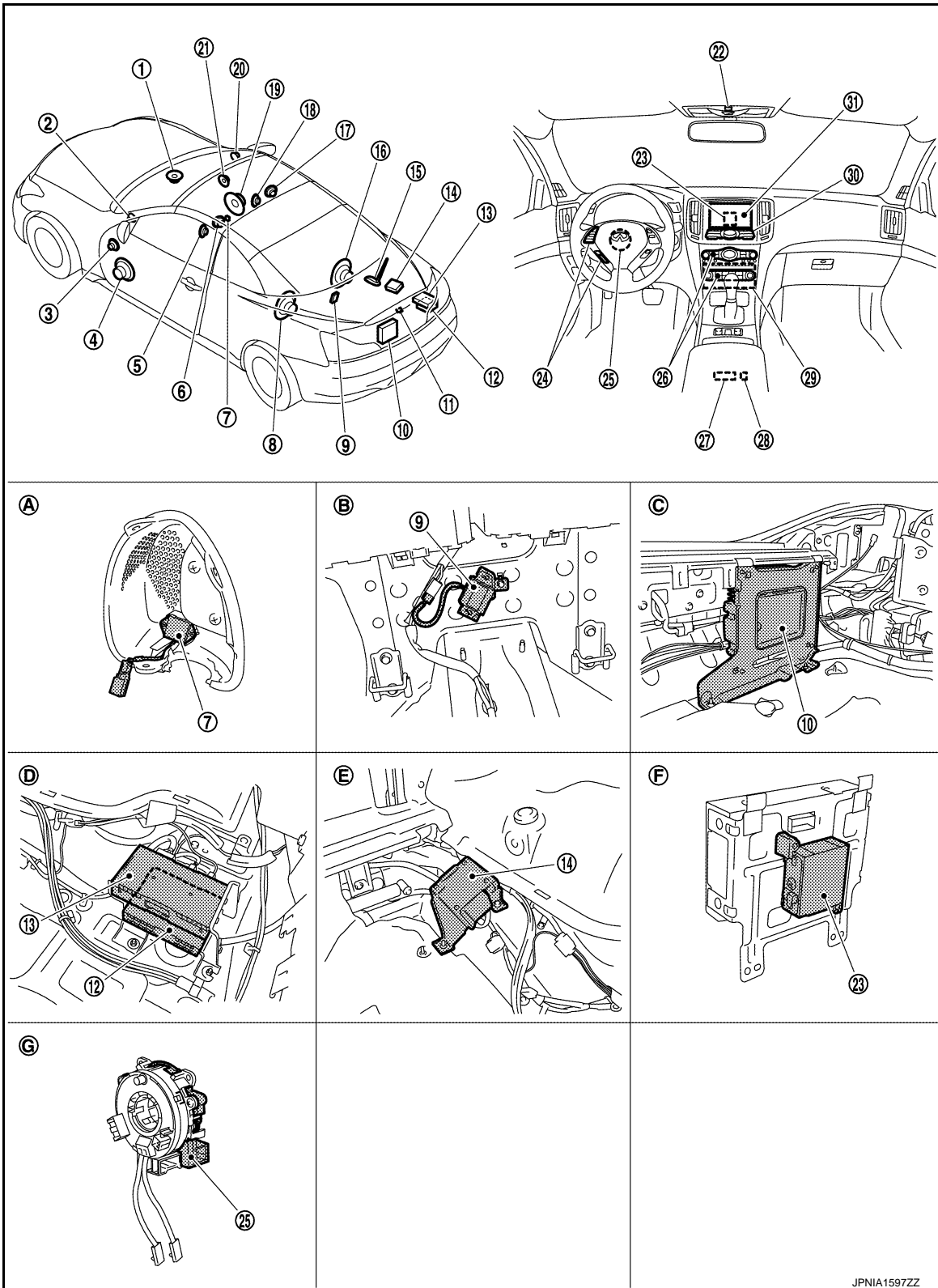
# REAR VIEW MONITOR SYSTEM

[BOSE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

## Component Parts Location

INFOID:000000004932426



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AV

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|---------------------------------|-------------------------------|-------------------------------|
| 1. Center speaker               | 2. Tweeter LH                 | 3. Door squawker LH           |
| 4. Door woofer LH               | 5. Driver headrest speaker LH | 6. Driver headrest speaker RH |
| 7. Microphone (for AudioPilot®) | 8. Rear woofer LH             | 9. TEL antenna                |
| 10. BOSE amp.                   | 11. Rear view camera          | 12. Satellite radio tuner     |

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# REAR VIEW MONITOR SYSTEM

[BOSE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

- |                                       |   |   |
|---------------------------------------|---|---|
| 13. TEL adapter unit                  | 14. Camera control unit                 | 15. Antenna base (antenna amp. and satellite antenna) |
| 16. Rear woofer RH                    | 17. Passenger headrest speaker RH       | 18. Passenger headrest speaker LH                     |
| 19. Door woofer RH                    | 20. Tweeter RH                          | 21. Door squawker RH                                  |
| 22. Microphone                        | 23. iPod adapter                        | 24. Steering switch                                   |
| 25. Steering angle sensor             | 26. Preset switch                       | 27. Auxiliary input jacks                             |
| 28. iPod connector                    | 29. AV control unit                     | 30. Multifunction switch                              |
| 31. Display unit                      |   |   |
| A. Inner grille is removed condition. | B. Rear seat back is removed condition. | C. Trunk rear plate is removed condition.             |
| D. Trunk room RH                      | E. Trunk room RH                        | F. Rear view of the display unit                      |
| G. Spiral cable part                  |   |   |

## Component Description

INFOID:000000004931944

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>Image on display is changed to rear view monitor image with serial communication between AV control unit and display unit.</li> <li>Inputs camera image signal from camera control unit, and outputs it to display unit.</li> </ul>
DISPLAY UNIT	<ul style="list-style-type: none"> <li>Camera image signal is transmitted from camera control unit via AV control unit.</li> <li>Rear view monitor image is changed with the communication for AV control unit.</li> </ul>
CAMERA CONTROL UNIT	<ul style="list-style-type: none"> <li>Camera image signal is input from rear view camera, and camera image is indicated on the display unit via AV control unit.</li> <li>Power (camera ON signal) is transmitted to rear view camera.</li> <li>Controlled by AV communication transmitted from AV control unit.</li> <li>AV control unit recognizes the presence of camera system with camera connection recognition signal.</li> </ul>
REAR VIEW CAMERA	The image of vehicle rear view is transmitted to camera control unit.
STEERING ANGLE SENSOR	Steering signal necessary for possible route line control is transmitted to camera control unit.

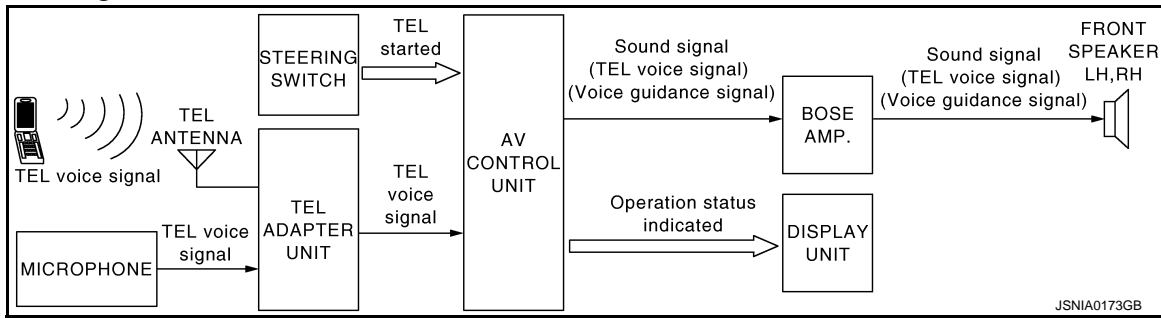
# HANDS-FREE PHONE SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

## HANDS-FREE PHONE SYSTEM

### System Diagram



### System Description

INFOID:000000004371582

- TEL adapter unit is controlled with AV communication from AV control unit.
- The connection between cellular phone and TEL adapter unit is performed with Bluetooth™.
- The voice guidance signal is input from the TEL adapter unit to the AV control unit and output via BOSE amp. to the front speaker and center speaker when operating the TEL.
- TEL adapter unit has the on board self-diagnosis function. Refer to [AV-208, "Diagnosis Description"](#).

#### WHEN RECEIVING A CALL

TEL voice signal received with the cellular phone is input from TEL antenna via TEL adapter unit to AV control unit with Bluetooth™ communication and output via BOSE amp. to the front speaker. The operation is performed with the steering switch or voice recognition function (TEL operation only).

#### WHEN A CALL IS TRANSMITTED

Speech sound (TEL voice signal) is input from the microphone to the TEL adapter unit. It is input from the TEL antenna via Bluetooth™ communication to the cellular phone. It is transmitted to the phone on the other side. The operation is performed with the steering switch or voice recognition function (TEL operation only).

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AV

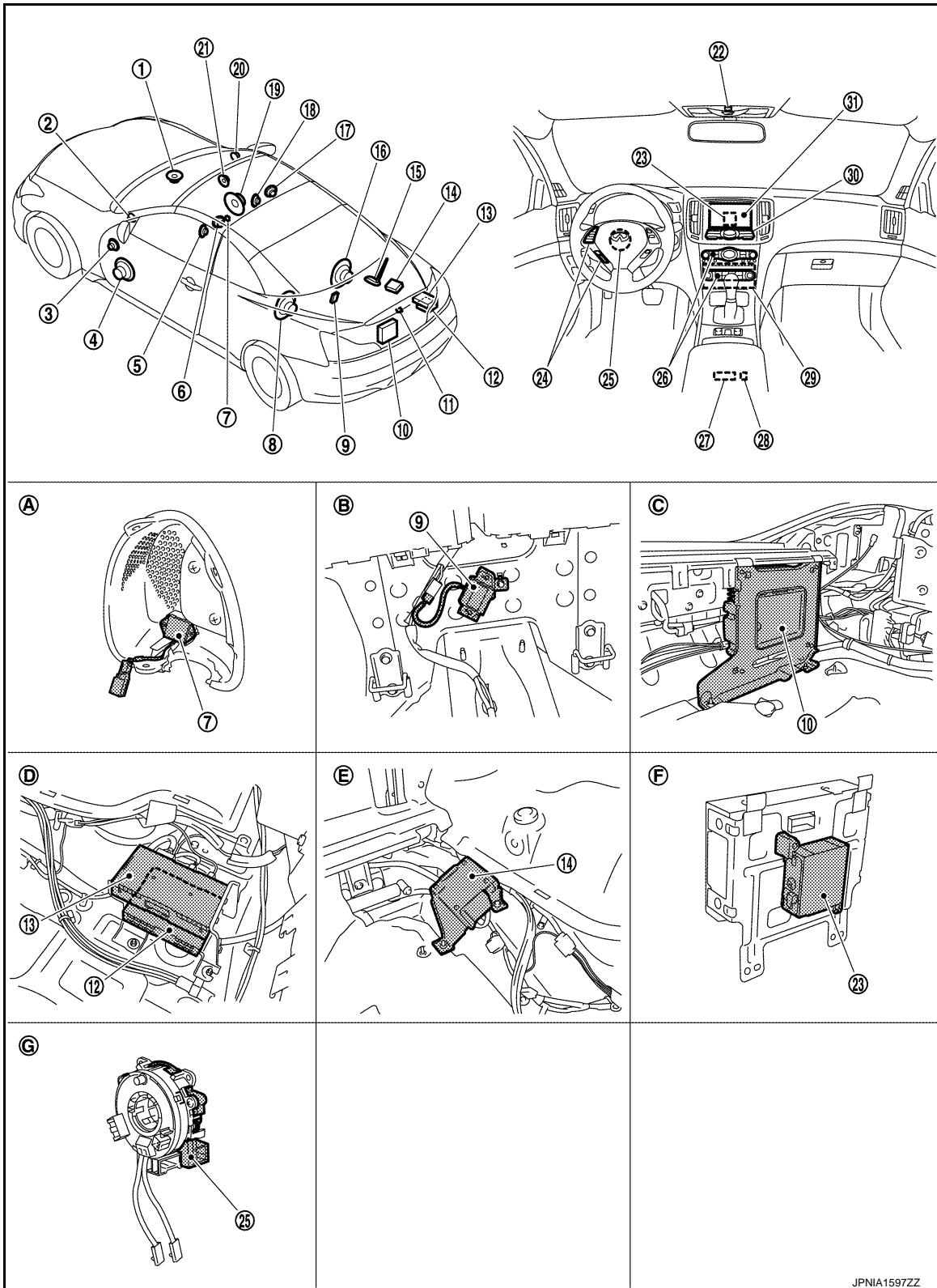
# HANDS-FREE PHONE SYSTEM

[BOSE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

## Component Parts Location

INFOID:000000004931718



- |                                  |                               |                               |
|----------------------------------|-------------------------------|-------------------------------|
| 1. Center speaker                | 2. Tweeter LH                 | 3. Door squawker LH           |
| 4. Door woofer LH                | 5. Driver headrest speaker LH | 6. Driver headrest speaker RH |
| 7. Microphone (for AudioPilot® ) | 8. Rear woofer LH             | 9. TEL antenna                |
| 10. BOSE amp.                    | 11. Rear view camera          | 12. Satellite radio tuner     |

# HANDS-FREE PHONE SYSTEM

[BOSE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

- |                           |                                   |   |
|---------------------------|-----------------------------------|---|
| 13. TEL adapter unit      | 14. Camera control unit           | 15. Antenna base (antenna amp. and satellite antenna) |
| 16. Rear woofer RH        | 17. Passenger headrest speaker RH | 18. Passenger headrest speaker LH                     |
| 19. Door woofer RH        | 20. Tweeter RH                    | 21. Door squawker RH                                  |
| 22. Microphone            | 23. iPod adapter                  | 24. Steering switch                                   |
| 25. Steering angle sensor | 26. Preset switch                 | 27. Auxiliary input jacks                             |
| 28. iPod connector        | 29. AV control unit               | 30. Multifunction switch                              |
| 31. Display unit          |                                   |   |
- A. Inner grille is removed condition.    B. Rear seat back is removed condition.    C. Trunk rear plate is removed condition.  
D. Trunk room RH    E. Trunk room RH    F. Rear view of the display unit  
G. Spiral cable part

## Component Description

INFOID:000000004371584

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>Inputs TEL voice signal or voice guidance signal from TEL adapter unit and outputs it to BOSE amp. during reception.</li> <li>Connects with TEL adapter unit and AV communication and controls hands-free phone system.</li> </ul>
DISPLAY UNIT	<ul style="list-style-type: none"> <li>Display image is controlled by the serial communication from AV control unit.</li> <li>Inputs RGB image signal (RGB, RGB area and RGB synchronizing) from AV control unit and displays the status of hands free phone system.</li> </ul>
BOSE AMP.	Inputs TEL voice signal or voice guidance signal from AV control unit and outputs it to front speaker and center speaker.
DOOR WOOFER	Outputs the TEL voice signal or voice guidance signal from BOSE amp.
DOOR SQUAWKER	
TWEETER	
CENTER SPEAKER	
PRESET SWITCH	<ul style="list-style-type: none"> <li>Adjust the sound when using TEL.</li> <li>The operation signal is transmitted to the AV control unit via AV communication.</li> </ul>
STEERING SWITCH	<ul style="list-style-type: none"> <li>The hands-free phone system can be operated.</li> <li>Steering switch signal (operation signal) is output to AV control unit.</li> </ul>
MICROPHONE	<ul style="list-style-type: none"> <li>Uses when operating the hands-free phone.</li> <li>Outputs Mic. signal (TEL voice signal) to the TEL adapter unit.</li> <li>The power (Mic. power supply) is supplied from the TEL adapter unit.</li> </ul>
TEL ADAPTER UNIT	<ul style="list-style-type: none"> <li>Receives the steering switch signal (operation signal) from the steering switch.</li> <li>Inputs the TEL voice signal from TEL antenna during reception and outputs it to the AV control unit.</li> <li>Inputs the TEL voice signal from microphone during speech recognition and outputs it to the TEL antenna.</li> <li>Controlled by AV communication transmitted from AV control unit.</li> </ul>
TEL ANTENNA	Connects with cellular phone via Bluetooth™ and communicates the TEL voice signal.

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

## DIAGNOSIS SYSTEM (AV CONTROL UNIT)

### Diagnosis Description

INFOID:000000004371585

#### MULTIFUNCTION SWITCH AND PRESET SWITCH SELF-DIAGNOSIS FUNCTION

The ON/OFF operation (continuity) of each switch in the multifunction switch and preset switch can be checked.

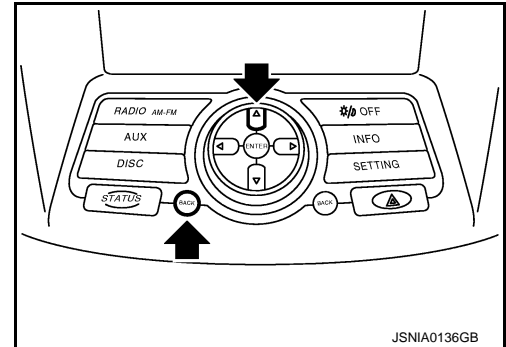
##### Self-diagnosis Mode

- Press the “BACK” switch and the “UP” switch of the 4-direction switches within 10 seconds after turning the ignition switch from OFF to ACC and hold them for 3 seconds or more. The buzzer sounds, all indicators of the preset switch illuminate, and the self-diagnosis mode starts.

- The continuity of each switch at the ON position can be checked by pressing the switch. The buzzer sounds if the switch is normal.

##### **CAUTION:**

**The hazard switch and CD eject switch cannot be checked.**



##### Finishing Self-diagnosis Mode

Self-diagnosis mode is canceled when turning the ignition switch OFF.

#### MULTI AV SYSTEM ON BOARD DIAGNOSIS FUNCTION

- The AV control unit diagnosis function starts up with multifunction switch operation and the AV control unit performs a diagnosis for each unit in the system during the on board diagnosis.
- Perform a CONSULT-III diagnosis if the on board diagnosis does not start, e.g., the screen does not display anything, the multifunction switch does not function, etc.

### ON BOARD DIAGNOSIS

#### Description

- The trouble diagnosis function has a self-diagnosis mode for conducting trouble diagnosis automatically and a confirmation/adjustment mode for operating manually.
- Self-diagnosis mode performs the AV control unit diagnosis and the connection diagnosis between each of the units that make up the system, and it indicates the results to the display.
- The confirmation/adjustment mode allows the technician to check, modify or adjust the vehicle signals and set values, as well as to monitor the system error records and system communication status. The checking, modifying or adjusting generally requires human intervention and judgment (the system cannot make judgment automatically).

#### On Board Diagnosis Item

Mode	Description
Self Diagnosis	<ul style="list-style-type: none"><li>• AV control unit diagnosis</li><li>• Perform the connection diagnosis between each of the units.</li></ul>

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

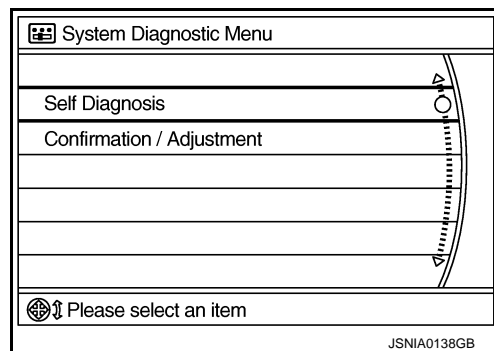
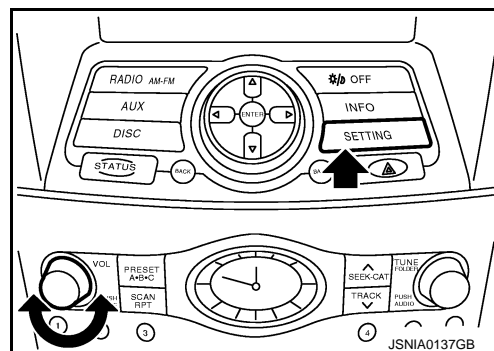
[BOSE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

	Mode	Description
Confirmation/ Adjustment	Display Diagnosis	The confirmations of the tint with the color spectrum bar display and shading of color with the gradation bar display can be performed.
	Vehicle Signals	Diagnosis of signals can be performed for vehicle speed, parking brake, lights, ignition switch, and reverse.
	Speaker Test	The connection of a speaker can be confirmed by test tone.
	Climate Control	Start auto air conditioner system self-diagnosis.
	Error History	The system malfunction and the frequency when occurring in the past are displayed. When the malfunctioning item is selected, the time and place that the selected malfunction last occurred are displayed.
	Camera Cont.	The signal connected to camera control unit can be checked and the guiding line position that overlaps rear view camera image can be adjusted.
	Vehicle CAN Diagnosis	The transmitting/receiving of CAN communication can be monitored.
	AV COMM Diagnosis	The communication condition of each unit of Multi AV system can be monitored.
	Delete Unit Connection Log	Erase the connection history of unit and error history
	Initialize Settings	Initializes the AV control unit memory.

## STARTING PROCEDURE

1. Start the engine.
2. Turn the audio system OFF.
3. While pressing the "SETTING" button, turn the volume control dial clockwise or counterclockwise for 40 clicks or more. (When the self-diagnosis mode is started, a short beep will be heard.)
  - Shifting from current screen to previous screen is performed by pressing "BACK" button.
4. The trouble diagnosis initial screen is displayed, and then the items of "Self Diagnosis" and "Confirmation/Adjustment" can be selected.



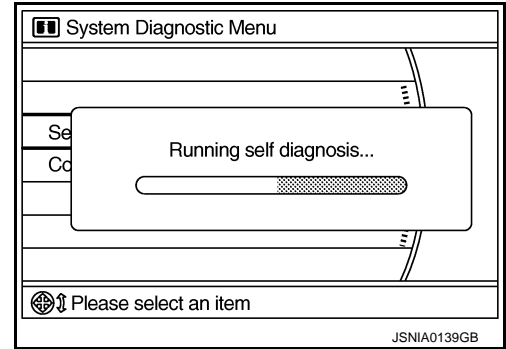
## SELF-DIAGNOSIS MODE

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

[BOSE AUDIO WITHOUT NAVIGATION]

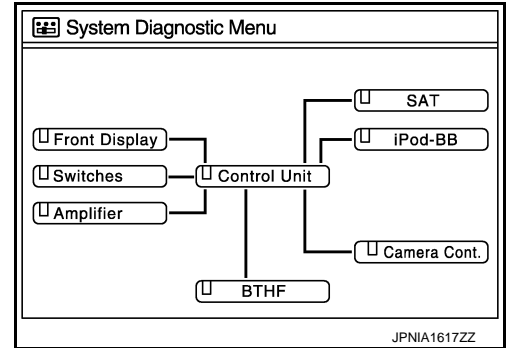
## < SYSTEM DESCRIPTION >

1. Start the self-diagnosis function and select "Self-diagnosis".
  - Self-diagnosis subdivision screen is displayed, and the self-diagnosis mode starts.
  - The bar graph visible on the center of the self-diagnosis subdivision screen indicates progress of the trouble diagnosis.



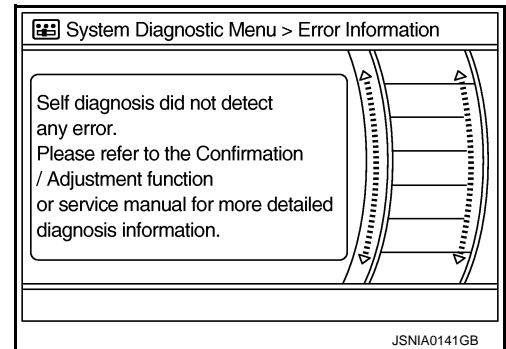
2. Diagnosis results are displayed after the self-diagnosis is completed. The unit names and the connection lines are color-coded according to the diagnostic results.

Diagnosis results	Unit	Con- nection line
Normal	Green	Green
Connection malfunction	Gray	Yellow
Unit malfunction <sup>Note</sup>	Red	Green



### NOTE:

- Only the control unit (AV control unit) is displayed in red.
- Replace AV control unit if "Self-Diagnosis did not run because of a control unit malfunction" is indicated. The symptom is AV control unit internal error. Refer to [AV-454, "Exploded View"](#).
- If multiple errors occur at the same time for a single unit, the screen switch colors are determined according to the following order of priority: red > gray.
- The comments of the self-diagnosis results can be viewed with a component in the diagnosis result screen.



### Detection Range of Self-diagnosis Mode

- The self-diagnosis mode allows the technician to diagnose the connection in the communication line between AV control unit and each unit and the internal operation of the AV control unit.
- Because the start condition of diagnosis function is a switch operation, the on board diagnosis function cannot be started up if any malfunction is detected in the communication circuit between AV control unit and multifunction switch.

## SELF-DIAGNOSIS RESULTS

Check the applicable display at the following table, and then repair the malfunctioning parts.

### Self-diagnosis Result Chart



# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

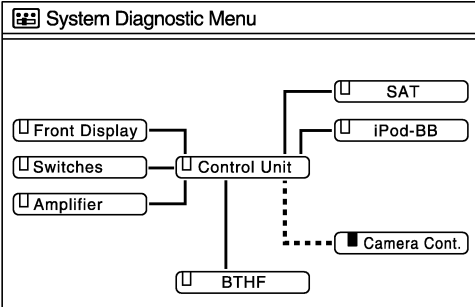
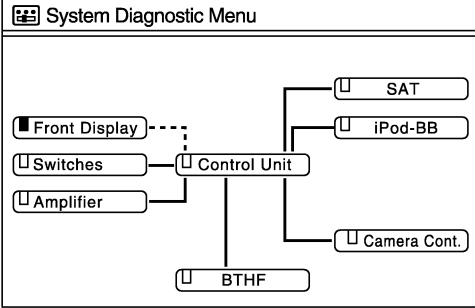
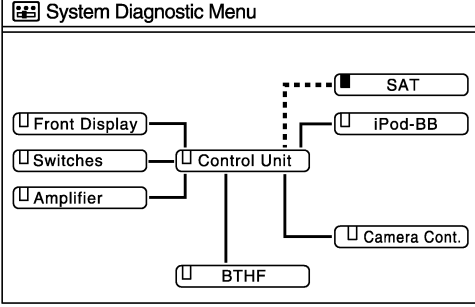
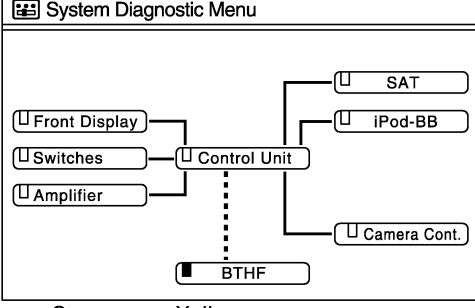
[BOSE AUDIO WITHOUT NAVIGATION]

Area with yellow connection lines	Description	Possible malfunction location / Action to take	
<div style="border: 1px solid black; padding: 5px;"> <p><b>System Diagnostic Menu</b></p> <p>■ : Red <span style="float: right;">JPNIA1618GB</span></p> </div> <p>“Self-Diagnosis did not run because of a control unit malfunction”</p>	<p>AV control unit malfunction is detected.</p>	<p>Replace the AV control unit.</p>	A B C D E
<div style="border: 1px solid black; padding: 5px;"> <p><b>System Diagnostic Menu</b></p> <p>■ : Red <span style="float: right;">JPNIA1623GB</span></p> </div>	<ul style="list-style-type: none"> <li>Sound signal circuits between BOSE amp. and each speaker is malfunctioning.</li> <li>BOSE amp. malfunction is detected.</li> </ul>	<ul style="list-style-type: none"> <li>Malfunctioning speaker circuits</li> <li>Replace BOSE amp.</li> </ul>	F G H I
<div style="border: 1px solid black; padding: 5px;"> <p><b>System Diagnostic Menu</b></p> <p>■ : Gray    - - - - : Yellow <span style="float: right;">JPNIA1624GB</span></p> </div>	<p>BOSE amp. power supply and ground circuits are malfunctioning.</p>	<p>BOSE amp. power supply and ground circuits.</p>	J K L
<div style="border: 1px solid black; padding: 5px;"> <p><b>System Diagnostic Menu</b></p> <p>■ : Gray    - - - - : Yellow <span style="float: right;">JPNIA1625GB</span></p> </div>	<p>Malfunction is detected in AV communication circuits between iPod adapter and BOSE amp.</p>	<p>AV communication circuits between iPod adapter and BOSE amp.</p>	M <b>AV</b> O P

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

Area with yellow connection lines	Description	Possible malfunction location / Action to take
 <p>■ : Gray    - - - - : Yellow</p> <p>JPNIA1636GB</p>	<p>Malfunction is detected in camera connection recognition signal circuit.</p>	<p>Camera connection recognition signal circuit.</p>
 <p>■ : Gray    - - - - : Yellow</p> <p>JPNIA1619GB</p>	<ul style="list-style-type: none"> <li>Malfunction is detected in communication circuit between AV control unit and display unit.</li> <li>Malfunction is detected in communication signal between AV control unit and display unit.</li> </ul>	<p>Communication circuit between AV control unit and display unit.</p>
 <p>■ : Gray    - - - - : Yellow</p> <p>JPNIA1620GB</p>	<ul style="list-style-type: none"> <li>Satellite radio tuner power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in communication circuits between AV control unit and satellite radio tuner.</li> <li>Malfunction is detected in communication signal between AV control unit and satellite radio tuner.</li> <li>Malfunction is detected in request signal circuit between AV control unit and satellite radio tuner.</li> </ul>	<ul style="list-style-type: none"> <li>Satellite radio tuner power supply and ground circuit.</li> <li>Communication circuit between AV control unit and satellite radio tuner.</li> <li>Request signal circuit between AV control unit and satellite radio tuner.</li> </ul>
 <p>■ : Gray    - - - - : Yellow</p> <p>JPNIA1621GB</p>	<ul style="list-style-type: none"> <li>TEL adapter unit power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in AV communication circuit between BOSE amp. and camera control unit.</li> <li>Malfunction is detected in AV communication circuit between camera control unit and TEL adapter unit.</li> <li>Malfunction is detected in AV communication signal between AV control unit and TEL adapter unit.</li> </ul>	<ul style="list-style-type: none"> <li>TEL adapter unit power supply and ground circuit.</li> <li>AV communication circuit between BOSE amp. and camera control unit.</li> <li>AV communication circuit between camera control unit and TEL adapter unit.</li> </ul>

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

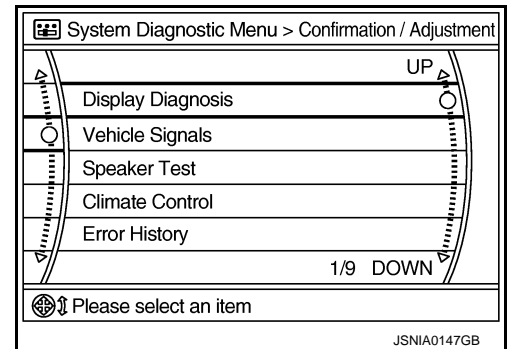
< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

Area with yellow connection lines	Description	Possible malfunction location / Action to take
<p>■ : Gray    - - - - : Yellow</p> <p>JPNIA1622GB</p>	<ul style="list-style-type: none"> <li>iPod adapter power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in AV communication circuit between multifunction switch and iPod adapter.</li> <li>Malfunction is detected in AV communication signal between AV control unit and iPod adapter.</li> </ul>	<ul style="list-style-type: none"> <li>iPod adapter power supply and ground circuit.</li> <li>AV communication circuit between multifunction switch and iPod adapter.</li> </ul>
<p>■ : Gray    - - - - : Yellow</p> <p>JPNIA1715GB</p>	<p>Malfunction is detected in AV communication circuit between AV control unit and iPod adapter.</p>	<p>AV communication circuit between AV control unit and iPod adapter.</p>

## CONFIRMATION/ADJUSTMENT MODE

- Start the diagnosis function and select "Confirmation/Adjustment". The confirmation/adjustment mode indicates where each item can be checked or adjusted.
- Select each switch on the "Confirmation/Adjustment Mode" screen to display the relevant trouble diagnosis screen. Press the "BACK" switch to return to the initial Confirmation/Adjustment Mode screen.



## Display Diagnosis

**Color Spectrum Bar**

If colors are abnormal, please refer to the service manual for diagnosis information

WHITE, YELLOW, CYAN, GREEN, BLUE, RED, BLACK

•CYAN: Close to light blue  
•MAGENTA: Close to purplish red

**Gradation Bar**

If colors are abnormal, please refer to the service manual for diagnosis information

Black ← GRAY → WHITE

•The gray-scale image is indicated 32-step gradation.

JSNIA0688GB

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

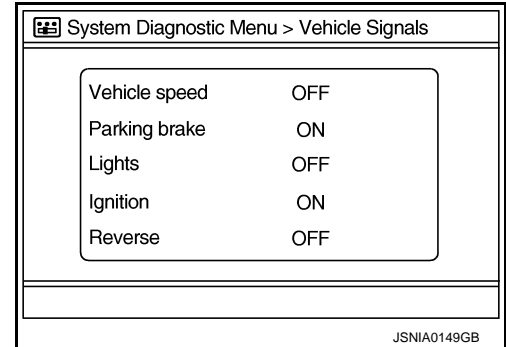
[BOSE AUDIO WITHOUT NAVIGATION]

The tint of the color bar indication is as per the following list if RGB signal error is detected.

- R (red) signal error** : Light blue (Cyan) tint
- G (green) signal error** : Purple (Magenta) tint
- B (blue) signal error** : Yellow tint

## Vehicle Signals

A comparison check can be made of each actual vehicle signal and the signals recognized by the system.



Diagnosis item	Display	Vehicle status	Remarks
Vehicle speed	ON	Vehicle speed > 0 km/h (0 MPH)	Changes in indication may be delayed. This is normal.
	OFF	Vehicle speed = 0 km/h (0 MPH)	
Parking brake	ON	Parking brake is applied.	
	OFF	Parking brake is released.	
Lights	ON	Light switch ON	—
	OFF	Light switch OFF	
Ignition	ON	Ignition switch ON	—
	OFF	Ignition switch in ACC position	
Reverse	ON	Shift the selector lever to "R" position	Changes in indication may be delayed. This is normal.
	OFF	Shift the selector lever other than "R" position	

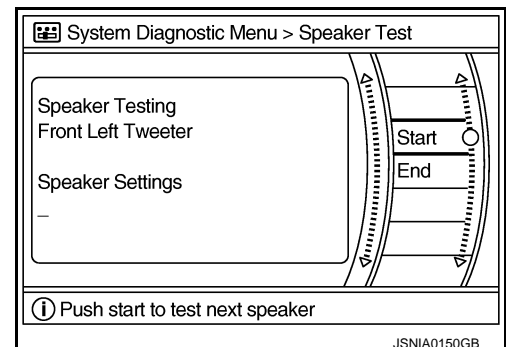
## Speaker Test

Select "Speaker Test" to display the speaker test screen. Press "Start" to generate a test tone in a speaker. Press "Start" again to generate a test tone in the next speaker. Press "End" to stop the test tones.

### NOTE:

The frequency of test tone emitted from each speaker is as follows.

- Tweeter** : 3 kHz
- Front speaker** : 300 Hz
- Rear speaker** : 1 kHz



## Climate Control

Refer to "HEATER & AIR CONDITIONING CONTROL SYSTEM" for details.

## Error History

The self-diagnosis results are judged depending on whether any error occurs from when "Self-diagnosis" is selected until the self-diagnosis results are displayed.

However, the diagnosis results are judged normal if an error has occurred before the ignition switch is turned ON and then no error has occurred until the self-diagnosis start. Check the "Error Record" to detect any error that may have occurred before the self-diagnosis start because of this situation.

Count up method A

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

[BOSE AUDIO WITHOUT NAVIGATION]

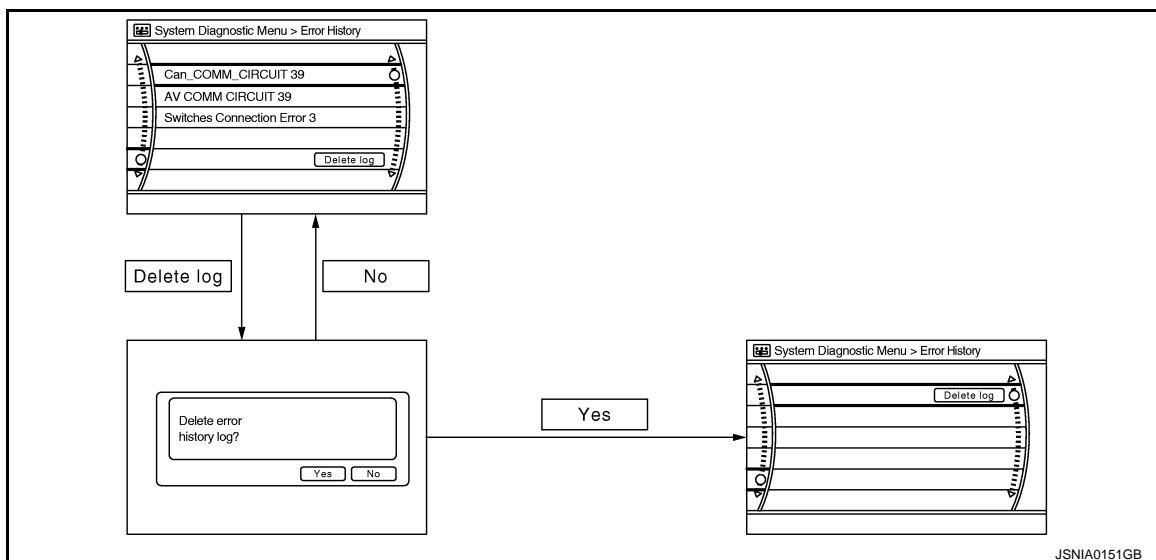
## < SYSTEM DESCRIPTION >

- The counter resets to 0 if an error occurs when ignition switch is turned ON. The counter increases by 1 if the condition is normal at a next ignition ON cycle.
- The counter upper limit is 39. Any counts exceeding 39 are ignored. The counter can be reset (no error record display) with the "Delete log" switch or CONSULT-III.

### Count up method B

- The counter increases by 1 if an error occurs when ignition switch is ON. The counter will not decrease even if the condition is normal at the next ignition ON cycle.
- The counter upper limit is 50. Any counts exceeding 50 are ignored. The counter can be reset (no error record display) with the "Delete log" switch or CONSULT-III.

Display type of occurrence frequency	Error history display item
Count up method A	CAN communication line, control unit (CAN), AV communication line, control unit (AV)
Count up method B	Other than the above



### Error item

Some error items may be displayed simultaneously according to the cause. If some error items are displayed simultaneously, the detection of the cause can be performed by the combination of display items

Error item	Description	Possible malfunction factor/Action to take
CAN COMM CIRCUIT	CAN communication malfunction is detected.	Perform diagnosis with CONSULT-III, and then repair the malfunctioning parts according to the diagnosis results. Refer to <a href="#">AV-203, "CONSULT - III Function (MULTI AV)"</a> .
CONTROL UNIT (CAN)	CAN initial diagnosis malfunction is detected.	Replace the AV control unit.
CONTROL UNIT (AV)	AV communication circuit initial diagnosis malfunction is detected.	
FLASH-ROM Error Of Control Unit CAN Controller Memory Error	AV control unit malfunction is detected.	
Amplifier Temperature Error	BOSE amp. malfunction is detected.	Replace the BOSE amp.
Front Display Connection Error	<ul style="list-style-type: none"> <li>• Display unit power supply and ground circuit malfunction is detected.</li> <li>• Malfunction is detected in communication circuit between AV control unit and display unit.</li> <li>• Malfunction is detected in communication signal between AV control unit and display unit.</li> </ul>	<ul style="list-style-type: none"> <li>• Display unit power supply and ground circuit.</li> <li>• Communication circuit between AV control unit and display unit.</li> </ul>

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
Camera Control Unit Connection Error	Malfunction is detected in camera connection recognition circuit between AV control unit and camera control unit.	Camera connection recognition circuit between AV control unit and camera control unit.
SAT Connection Error	<ul style="list-style-type: none"> <li>• Satellite radio tuner power supply and ground circuit malfunction is detected.</li> <li>• Malfunction is detected in communication circuit between AV control unit and satellite radio tuner.</li> <li>• Malfunction is detected in communication signal between AV control unit and satellite radio tuner.</li> <li>• Malfunction is detected in request signal circuit between AV control unit and satellite radio tuner.</li> </ul>	<ul style="list-style-type: none"> <li>• Satellite radio tuner power supply and ground circuit.</li> <li>• Communication circuit between AV control unit and satellite radio tuner.</li> <li>• Request signal circuit between AV control unit and satellite radio tuner.</li> </ul>
Center speaker OUT: open	Sound signal center speaker circuit is open.	Check sound signal center speaker circuit.
Center speaker OUT: short	Sound signal center speaker circuit is shorted between center speaker signal (+) and center speaker signal (-).	Check sound signal center speaker circuit.
Center speaker OUT: short to ground	Sound signal center speaker circuit to ground is shorted.	Check sound signal center speaker circuit.
Center speaker OUT: short to battery	Sound signal center speaker circuit to battery is shorted.	Check sound signal center speaker circuit.
FR speaker OUT: open	Sound signal front speaker RH circuit is open.	Check sound signal front speaker RH circuit.
FR speaker OUT: short	Sound signal front speaker RH circuit is shorted between front speaker RH signal (+) and front speaker RH signal (-).	Check sound signal front speaker RH circuit.
FR speaker OUT: short to ground	Sound signal front speaker RH circuit to ground is shorted.	Check sound signal front speaker RH circuit.
FR speaker OUT: short to battery	Sound signal front speaker RH circuit to battery is shorted.	Check sound signal front speaker RH circuit.
RR speaker OUT: open	Sound signal door woofer RH circuit is open.	Check sound signal door woofer RH circuit.
RR speaker OUT: short	Sound signal door woofer RH circuit is shorted between rear door woofer RH signal (+) and door woofer RH signal (-).	Check sound signal door woofer RH circuit.
RR speaker OUT: short to ground	Sound signal door woofer RH circuit to ground is shorted.	Check sound signal door woofer RH circuit.
RR speaker OUT: short to battery	Sound signal door woofer RH circuit to battery is shorted.	Check sound signal door woofer RH circuit.
RR SR-speaker OUT: open	Sound signal rear woofer RH circuit is open.	Check sound signal rear woofer RH circuit.
RR SR-speaker OUT: short	Sound signal rear woofer RH circuit is shorted between rear woofer RH signal (+) and rear woofer RH signal (-).	Check sound signal rear woofer RH circuit.
RR SR-speaker OUT: short to ground	Sound signal rear woofer RH circuit to ground is shorted.	Check sound signal rear woofer RH circuit.
RR SR-speaker OUT: short to battery	Sound signal rear woofer RH circuit to battery is shorted.	Check sound signal rear woofer RH circuit.
RL SR-speaker OUT: open	Sound signal rear woofer LH circuit is open.	Check sound signal rear woofer LH circuit.
RL SR-speaker OUT: short	Sound signal rear woofer LH circuit is shorted between rear woofer LH signal (+) and rear woofer LH signal (-).	Check sound signal rear woofer LH circuit.
RL SR-speaker OUT: short to ground	Sound signal rear woofer LH circuit to ground is shorted.	Check sound signal rear woofer LH circuit.

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take	
RL SR-speaker OUT: short to battery	Sound signal rear woofer LH circuit to battery is shorted.	Check sound signal rear woofer LH circuit.	A
RL speaker OUT: open	Sound signal door woofer LH circuit is open.	Check sound signal door woofer LH circuit.	B
RL speaker OUT: short	Sound signal door woofer LH circuit is shorted between door woofer LH signal (+) and door woofer LH signal (-).	Check sound signal door woofer LH circuit.	C
RL speaker OUT: short to ground	Sound signal door woofer LH circuit to ground is shorted.	Check sound signal door woofer LH circuit.	
RL speaker OUT: short to battery	Sound signal door woofer LH circuit to battery is shorted.	Check sound signal door woofer LH circuit.	D
FL speaker OUT: open	Sound signal front speaker LH circuit is open.	Check sound signal front speaker LH circuit.	E
FL speaker OUT: short	Sound signal front speaker LH circuit is shorted between front speaker LH signal (+) and front speaker LH signal (-).	Check sound signal front speaker LH circuit.	F
FL speaker OUT: short to ground	Sound signal front speaker LH circuit to ground is shorted.	Check sound signal front speaker LH circuit.	
FL speaker OUT: short to battery	Sound signal front speaker LH circuit to battery is shorted.	Check sound signal front speaker LH circuit.	G
FL seat SP(L) OUT: open	Sound signal driver headrest speaker LH circuit is open.	Check sound signal driver headrest speaker LH circuit.	H
FL seat SP(L) OUT: short	Sound signal driver headrest speaker LH circuit is shorted between driver headrest speaker LH signal (+) and driver headrest speaker LH signal (-).	Check sound signal driver headrest speaker LH circuit.	I
FL seat SP(L) OUT: short to ground	Sound signal driver headrest speaker LH circuit to ground is shorted.	Check sound signal driver headrest speaker LH circuit.	
FL seat SP(L) OUT: short to battery	Sound signal driver headrest speaker LH circuit to battery is shorted.	Check sound signal driver headrest speaker LH circuit.	J
FL seat SP(R) OUT: open	Sound signal driver headrest speaker RH circuit is open.	Check sound signal driver headrest speaker RH circuit.	K
FL seat SP(R) OUT: short	Sound signal driver headrest speaker RH circuit is shorted between driver headrest speaker RH signal (+) and driver headrest speaker RH signal (-).	Check sound signal driver headrest speaker RH circuit.	L
FL seat SP(R) OUT: short to ground	Sound signal driver headrest speaker RH circuit to ground is shorted.	Check sound signal driver headrest speaker RH circuit.	
FL seat SP(R) OUT: short to battery	Sound signal driver headrest speaker RH circuit to battery is shorted.	Check sound signal driver headrest speaker RH circuit.	M
FR seat SP(L) OUT: open	Sound signal passenger headrest speaker LH circuit is open.	Check sound signal passenger headrest speaker LH circuit.	AV
FR seat SP(L) OUT: short	Sound signal passenger headrest speaker LH circuit is shorted between passenger headrest speaker LH signal (+) and passenger headrest speaker LH signal (-).	Check sound signal passenger headrest speaker LH circuit.	O
FR seat SP(L) OUT: short to ground	Sound signal passenger headrest speaker LH circuit to ground is shorted.	Check sound signal passenger headrest speaker LH circuit.	
FR seat SP(L) OUT: short to battery	Sound signal passenger headrest speaker LH circuit to battery is shorted.	Check sound signal passenger headrest speaker LH circuit.	P
FR seat SP(R) OUT: open	Sound signal passenger headrest speaker RH circuit is open.	Check sound signal passenger headrest speaker RH circuit.	

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
FR seat SP(R) OUT: short	Sound signal passenger headrest speaker RH circuit is shorted between passenger headrest speaker RH signal (+) and passenger headrest speaker RH signal (-).	Check sound signal passenger headrest speaker RH circuit.
FR seat SP(R) OUT: short to ground	Sound signal passenger headrest speaker RH circuit to ground is shorted.	Check sound signal passenger headrest speaker RH circuit.
FR seat SP(R) OUT: short to battery	Sound signal passenger headrest speaker RH circuit to battery is shorted.	Check sound signal passenger headrest speaker RH circuit.
Compensat. mic IN: open	Mic. signal (for AudioPilot®) circuit is open.	Check Mic. signal (for AudioPilot®) circuit.
Compensat. mic IN: short	Mic. signal (for AudioPilot®) circuit is shorted between MIC.signal (for AudioPilot®) (+) and MIC.signal (for AudioPilot®) (-).	Check Mic. signal (for AudioPilot®) circuit.
Compensat. mic IN: short to ground	Mic. signal (for AudioPilot®) circuit to ground is shorted.	Check Mic. signal (for AudioPilot®) circuit.
Compensat. mic IN: short to battery	Mic. signal (for Audiopilot®) circuit to battery is shorted.	Check Mic. signal (for AudioPilot®) circuit.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Switches Connection Error</li> </ul>	<ul style="list-style-type: none"> <li>• Multifunction switch power supply and ground circuit malfunction is detected.</li> <li>• Malfunction is detected in AV communication circuit between AV control unit and multifunction switch.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and multifunction switch.</li> </ul>	<ul style="list-style-type: none"> <li>• Multifunction switch power supply and ground circuit.</li> <li>• AV communication circuit between AV control unit and multifunction switch.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Amplifier Connection Error</li> </ul>	BOSE amp. power supply and ground circuits are malfunctioning.	BOSE amp. power supply and ground circuits.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Rearview Camera Connection Error</li> </ul>	Camera control unit power supply and ground circuits malfunction is detected.	Camera control unit power supply and ground circuits.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• iPod Connection Error</li> </ul>	<ul style="list-style-type: none"> <li>• iPod adapter power supply and ground circuit malfunction is detected.</li> <li>• Malfunction is detected in AV communication circuit between multifunction switch and iPod adapter.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and iPod adapter.</li> </ul>	<ul style="list-style-type: none"> <li>• iPod adapter power supply and ground circuit.</li> <li>• AV communication circuit between multifunction switch and iPod adapter.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• H/F Unit Connection Error</li> </ul>	<ul style="list-style-type: none"> <li>• TEL adapter unit power supply and ground circuit malfunction is detected.</li> <li>• Malfunction is detected in AV communication circuit between BOSE amp. and camera control unit.</li> <li>• Malfunction is detected in AV communication circuit between camera control unit and TEL adapter unit.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and TEL adapter unit.</li> </ul>	<ul style="list-style-type: none"> <li>• TEL adapter unit power supply and ground circuit.</li> <li>• AV communication circuit between BOSE amp. and camera control unit.</li> <li>• AV communication circuit between camera control unit and TEL adapter unit.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Rearview Camera Connection Error</li> <li>• H/F Unit Connection Error</li> </ul>	Malfunction is detected in AV communication circuit between BOSE amp. and camera control unit.	AV communication circuit between BOSE amp. and camera control unit.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Rearview Camera Connection Error</li> <li>• H/F Unit Connection Error</li> <li>• Amplifier Connection Error</li> </ul>	Malfunction is detected in AV communication circuit between iPod adapter and BOSE amp.	AV communication circuit between iPod adapter and BOSE amp.



# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

[BOSE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

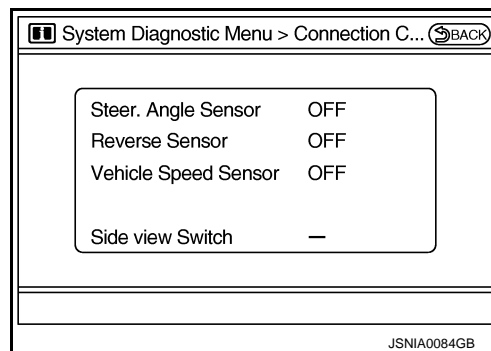
Error item	Description	Possible malfunction factor/Action to take
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Rearview Camera Connection Error</li> <li>• iPod Unit Connection Error</li> <li>• H/F Unit Connection Error</li> <li>• Amplifier Connection Error</li> </ul>	Malfunction is detected in AV communication circuit between AV control unit and iPod adapter.	AV communication circuit between AV control unit and iPod adapter.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Switches Connection Error</li> <li>• Rearview Camera Connection Error</li> <li>• iPod Unit Connection Error</li> <li>• H/F Unit Connection Error</li> <li>• Amplifier Connection Error</li> </ul>	Malfunction is detected in AV communication circuit between AV control unit and multifunction switch.	AV communication circuit between AV control unit and multifunction switch.

Camera Cont.

The two functions of “Connection Confirmation” and “Adjust Offset of Rear View Camera” are available.

## CONNECTION CONFIRMATION

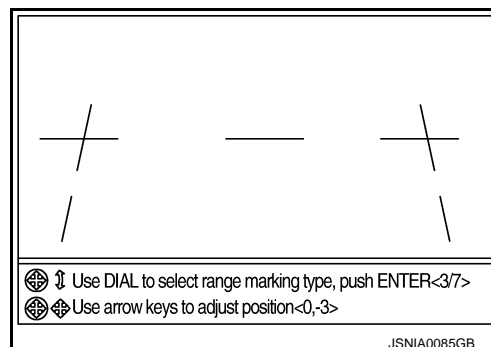
The steering angle sensor, reverse signal and vehicle speed sensor can be inspected.



Diagnosis item	Display	Vehicle status
Steer. Angle Sensor	ON	When steering the vehicle with ignition switch ON (remains ON until connection mode is stopped when it is turned ON)
	OFF	<ul style="list-style-type: none"> <li>• Ignition switch at ACC</li> <li>• No steering with ignition switch ON</li> </ul>
	—	Malfunction detected in camera connection recognition signal
Reverse Sensor	ON	Selector lever is in “R” with ignition switch ON.
	OFF	<ul style="list-style-type: none"> <li>• Ignition switch at ACC</li> <li>• Selector lever is in position other than “R” with ignition switch ON.</li> </ul>
	—	Malfunction detected in camera-connection recognition signal
Vehicle Speed Sensor	ON	Vehicle speed is more than 0 km/h (0 MPH) with ignition switch ON
	OFF	<ul style="list-style-type: none"> <li>• Ignition switch at ACC</li> <li>• Vehicle speed is 0 km/h (0 MPH) with ignition switch ON</li> </ul>
	—	Malfunction detected in camera connection recognition signal
Side view Switch	—	Not used

## ADJUST OFFSET OF REAR VIEW CAMERA

Use this mode to adjust the guide line display position of the rear-view monitor if necessary after removing the rear view monitor camera.



# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

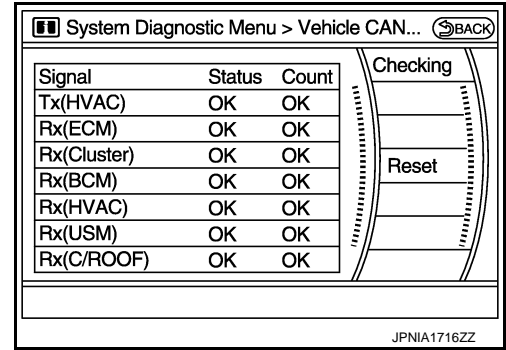
[BOSE AUDIO WITHOUT NAVIGATION]

## < SYSTEM DESCRIPTION >

### Vehicle CAN Diagnosis

- CAN communication status and error counter is displayed.
- The error counter displays “OK” if any malfunction was not detected in the past and displays “0” if a malfunction is detected. It increases by 1 if the condition is normal at the next ignition switch ON cycle. The upper limit of the counter is 39.
- The error counter is erased if reset.

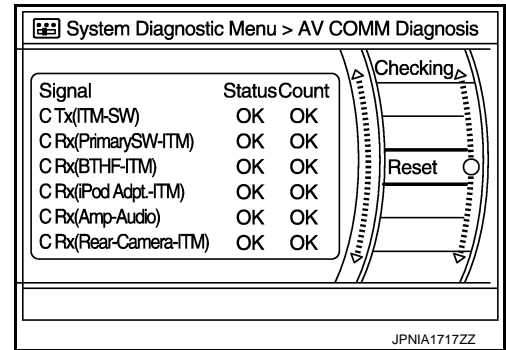
Items	Display (Current)	Malfunction counter (Past)
Tx (HVAC)	OK / UNKWN	OK / 0 - 39
Rx (ECM)	OK / UNKWN	OK / 0 - 39
Rx (Cluster)	OK / UNKWN	OK / 0 - 39
Rx (BCM)	OK / UNKWN	OK / 0 - 39
Rx (HVAC)	OK / UNKWN	OK / 0 - 39
Rx (USM)	OK / UNKWN	OK / 0 - 39
Rx (C/ROOF)	OK / UNKWN	OK / 0 - 39



### AV COMM Diagnosis

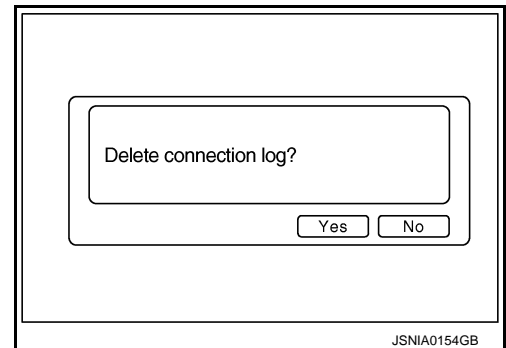
- Displays the communication status between AV control unit (master unit) and each unit.
- The error counter displays “OK” if any malfunction was not detected in the past and displays “0” if a malfunction is detected. It increases by 1 if the condition is normal at the next ignition switch ON cycle. The upper limit of the counter is 39.
- If it resets, the error counter is erased.

Items	Status (Current)	Counter (Past)
C Tx(ITM-SW)	OK / UNKWN	OK / 0 - 39
C Rx(PrimarySW-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(BTHF-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(iPod Adpt.-ITM)	OK / UNKWN	OK / 0 - 39
C Rx(Amp-Audio)	OK / UNKWN	OK / 0 - 39
C Rx(Rear-Camera-ITM)	OK / UNKWN	OK / 0 - 39



### Delete Unit Connection Log

Deletes any unit connection records and error records from the AV control unit memory. (Clear the records of the unit that has been removed)



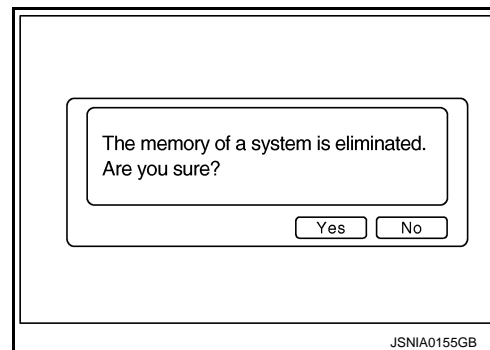
### Initialize Settings

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

Initializes the AV control unit memory.



## CONSULT - III Function (MULTI AV)

INFOID:000000004371586

### CONSULT-III FUNCTIONS

CONSULT-III performs the following functions via the communication with the AV control unit.

Diagnosis mode	Description
Ecu Identification	The part number of AV control unit can be checked.
Self Diagnostic Result	Performs a diagnosis on the AV control unit and a connection diagnosis for the communication circuit of the Multi AV system, and displays the current and past malfunctions collectively.
Data Monitor	The diagnosis of vehicle signal that is input to the AV control unit can be performed.

### AV COMMUNICATION

When "AV communication" of "CAN Diag Support Monitor" is selected, the following function will be performed.

AV communication	AV&NAVI C/U	Displays the communication status from AV control unit to each unit as well as the error counter.
	AUDIO	Displays the AV control unit communication status and the error counter.

### ECU IDENTIFICATION

The part number of AV control unit is displayed.

### SELF DIAGNOSIS RESULT

- In CONSULT-III self-diagnosis, self-diagnosis results and error history are displayed collectively.
- The current malfunction indicates "CRNT". The past malfunction indicates "PAST".
- The timing is displayed as "0" if any of the error codes [U1000], [U1010], [U1300] and [U1310] is detected. The counter increases by 1 if the condition is normal at the next ignition switch ON cycle.

Self-diagnosis results display item

Error item	Description	Possible malfunction factor/Action to take
CAN COMM CIRCUIT [U1000]	CAN communication malfunction is detected.	Perform diagnosis with CONSULT-III, and then repair the malfunctioning parts according to the diagnosis results. Refer to <a href="#">AV-210, "Diagnosis Procedure"</a> .
CONTROL UNIT (CAN) [U1010]	CAN initial diagnosis malfunction is detected.	Replace the AV control unit
CONTROL UNIT (AV) [U1310]	AV communication circuit initial diagnosis malfunction is detected.	
Cont Unit FLASH-ROM [U1200]	AV control unit malfunction is detected.	
CAN CONT [U1216]		
AMP TEMP [U1231]	BOSE amp. malfunction is detected.	Replace the BOSE amp.

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
FRONT DISP CONN [U1243]	<ul style="list-style-type: none"> <li>• Display unit power supply and ground circuit malfunction is detected.</li> <li>• Malfunction is detected in communication circuit between AV control unit and display unit.</li> <li>• Malfunction is detected in communication signal between AV control unit and display unit.</li> </ul>	<ul style="list-style-type: none"> <li>• Display unit power supply and ground circuit.</li> <li>• Communication circuit between AV control unit and display unit.</li> </ul>
CAMERA CONT. CONN [U1250]	Malfunction is detected in camera connection recognition circuit between AV control unit and camera control unit.	Camera connection recognition circuit between AV control unit and camera control unit.
SAT CONN [U1255]	<ul style="list-style-type: none"> <li>• Satellite radio tuner power supply and ground circuit malfunction is detected.</li> <li>• Malfunction is detected in communication signal between AV control unit and satellite radio tuner.</li> <li>• Malfunction is detected in communication circuit between AV control unit and satellite radio tuner.</li> <li>• Malfunction is detected in request signal circuit between AV control unit and satellite radio tuner.</li> </ul>	<ul style="list-style-type: none"> <li>• Satellite radio tuner power supply and ground circuit.</li> <li>• Communication circuit between AV control unit and satellite radio tuner.</li> <li>• Request signal circuit between AV control unit and satellite radio tuner.</li> </ul>
CENTER SP OPEN [U1260]	Sound signal center speaker circuit is open.	Check sound signal center speaker circuit.
CENTER SP SHORT [U1261]	Sound signal center speaker circuit is shorted between center speaker signal (+) and center speaker signal (-).	Check sound signal center speaker circuit.
CENTER SP GND-SHORT [U1262]	Sound signal center speaker circuit to ground is shorted.	Check sound signal center speaker circuit.
CENTER SP VB-SHORT [U1263]	Sound signal center speaker circuit to battery is shorted.	Check sound signal center speaker circuit.
FR-DOOR SP OPEN [U1264]	Sound signal front speaker RH circuit is open.	Check sound signal front speaker RH circuit.
FR-DOOR SP SHORT [U1265]	Sound signal front speaker RH circuit is shorted between front speaker RH signal (+) and front speaker RH signal (-).	Check sound signal front speaker RH circuit.
FR-DOOR SP GND-SHORT [U1266]	Sound signal front speaker RH circuit to ground is shorted.	Check sound signal front speaker RH circuit.
FR-DOOR SP VB-SHORT [U1267]	Sound signal front speaker RH circuit to battery is shorted.	Check sound signal front speaker RH circuit.
RR-SP/FR-WOOFER OPEN [U1268]	Sound signal door woofer RH circuit is open.	Check sound signal door woofer RH circuit.
RR-SP/FR-WOOFER SHORT [U1269]	Sound signal door woofer RH circuit is shorted between door woofer RH signal (+) and door woofer RH signal (-).	Check sound signal door woofer RH circuit.
RR-SP/FR-WOOFER GND-SHORT [U126A]	Sound signal door woofer RH circuit to ground is shorted.	Check sound signal door woofer RH circuit.
RR-SP/FR-WOOFER VB-SHORT [U126B]	Sound signal door woofer RH circuit to battery is shorted.	Check sound signal door woofer RH circuit.
RR-SURROUND SP OPEN [U126C]	Sound signal rear woofer RH circuit is open.	Check sound signal rear woofer RH circuit.
RR-SURROUND SP SHORT [U126D]	Sound signal rear woofer RH circuit is shorted between rear woofer RH signal (+) and rear woofer RH signal (-).	Check sound signal rear woofer RH circuit.
RR-SURROUND SP GND-SHORT [U126E]	Sound signal rear woofer RH circuit to ground is shorted.	Check sound signal rear woofer RH circuit.

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
RR-SURROUND SP VB-SHORT [U126F]	Sound signal rear woofer RH circuit to battery is shorted.	Check sound signal rear woofer RH circuit.
RL-SURROUND SP OPEN [U1274]	Sound signal rear woofer LH circuit is open.	Check sound signal rear woofer LH circuit.
RL-SURROUND SP SHORT [U1275]	Sound signal rear woofer LH circuit is shorted between rear woofer LH signal (+) and rear woofer LH signal (-).	Check sound signal rear woofer LH circuit.
RL-SURROUND SP GND-SHORT [U1276]	Sound signal rear woofer LH circuit to ground is shorted.	Check sound signal rear woofer LH circuit.
RL-SURROUND SP VB-SHORT [U1277]	Sound signal rear woofer LH circuit to battery is shorted.	Check sound signal rear woofer LH circuit.
RL-SP/FL-WOOFER OPEN [U1278]	Sound signal door woofer LH circuit is open.	Check sound signal door woofer LH circuit.
RL-SP/FL-WOOFER SHORT [U1279]	Sound signal door woofer LH circuit is shorted between door woofer LH signal (+) and door woofer LH signal (-).	Check sound signal door woofer LH circuit.
RL-SP/FL-WOOFER GND-SHORT [U127A]	Sound signal door woofer LH circuit to ground is shorted.	Check sound signal door woofer LH circuit.
RL-SP/FL-WOOFER VB-SHORT [U127B]	Sound signal door woofer LH circuit to battery is shorted.	Check sound signal door woofer LH circuit.
FL-DOOR SP OPEN [U127C]	Sound signal front speaker LH circuit is open.	Check sound signal front speaker LH circuit.
FL-DOOR SP SHORT [U127D]	Sound signal front speaker LH circuit is shorted between front speaker LH signal (+) and front speaker LH signal (-).	Check sound signal front speaker LH circuit.
FL-DOOR SP GND-SHORT [U127E]	Sound signal front speaker LH circuit to ground is shorted.	Check sound signal front speaker LH circuit.
FL-DOOR SP VB-SHORT [U127F]	Sound signal front speaker LH circuit to battery is shorted.	Check sound signal front speaker LH circuit.
FL-SEAT L-SP OPEN [U1280]	Sound signal driver headrest speaker LH circuit is open.	Check sound signal driver headrest speaker LH circuit.
FL-SEAT L-SP SHORT [U1281]	Sound signal driver headrest speaker LH circuit is shorted between driver headrest speaker LH signal (+) and driver headrest speaker LH signal (-).	Check sound signal driver headrest speaker LH circuit.
FL-SEAT L-SP GND-SHORT [U1282]	Sound signal driver headrest speaker LH circuit to ground is shorted.	Check sound signal driver headrest speaker LH circuit.
FL-SEAT L-SP VB-SHORT [U1283]	Sound signal driver headrest speaker LH circuit to battery is shorted.	Check sound signal driver headrest speaker LH circuit.
FL-SEAT R-SP OPEN [U1284]	Sound signal driver headrest speaker RH circuit is open.	Check sound signal driver headrest speaker RH circuit.
FL-SEAT R-SP SHORT [U1285]	Sound signal driver headrest speaker RH circuit is shorted between driver headrest speaker RH signal (+) and driver headrest speaker RH signal (-).	Check sound signal driver headrest speaker RH circuit.
FL-SEAT R-SP GND-SHORT [U1286]	Sound signal driver headrest speaker RH circuit to ground is shorted.	Check sound signal driver headrest speaker RH circuit.
FL-SEAT R-SP VB-SHORT [U1287]	Sound signal driver headrest speaker RH circuit to battery is shorted.	Check sound signal driver headrest speaker RH circuit.
FR-SEAT L-SP OPEN [U1288]	Sound signal passenger headrest speaker LH circuit is open.	Check sound signal passenger headrest speaker LH circuit.
FR-SEAT L-SP SHORT [U1289]	Sound signal passenger headrest speaker LH circuit is shorted between passenger headrest speaker LH signal (+) and passenger headrest speaker LH signal (-).	Check sound signal passenger headrest speaker LH circuit.

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AV

## DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
FR-SEAT L-SP GND-SHORT [U128A]	Sound signal passenger headrest speaker LH circuit to ground is shorted.	Check sound signal passenger headrest speaker LH circuit.
FR-SEAT L-SP VB-SHORT [U128B]	Sound signal passenger headrest speaker LH circuit to battery is shorted.	Check sound signal passenger headrest speaker LH circuit.
FR-SEAT R-SP OPEN [U128C]	Sound signal passenger headrest speaker RH circuit is open.	Check sound signal passenger headrest speaker RH circuit.
FR-SEAT R-SP SHORT [U128D]	Sound signal passenger headrest speaker RH circuit is shorted between passenger headrest speaker RH signal (+) and passenger headrest speaker RH signal (-).	Check sound signal passenger headrest speaker RH circuit.
FR-SEAT R-SP GND-SHORT [U128E]	Sound signal passenger headrest speaker RH circuit to ground is shorted.	Check sound signal passenger headrest speaker RH circuit.
FR-SEAT R-SP VB-SHORT [U128F]	Sound signal passenger headrest speaker RH circuit to battery is shorted.	Check sound signal passenger headrest speaker RH circuit.
CORRECT MICRO OPEN [U1290]	Mic. signal (for AudioPilot®) circuit is open.	Check Mic. signal (for AudioPilot®) circuit.
CORRECT MICRO SHORT [U1291]	Mic. signal (for AudioPilot®) circuit is shorted between MIC.signal (for AudioPilot®) (+) and MIC.signal (for AudioPilot®) (-).	Check Mic. signal (for AudioPilot®) circuit.
CORRECT MICRO GND-SHORT [U1292]	Mic. signal (for AudioPilot®) circuit to ground is shorted.	Check Mic. signal (for AudioPilot®) circuit.
CORRECT MICRO VB-SHORT [U1293]	Mic. signal (for AudioPilot®) circuit to battery is shorted.	Check Mic. signal (for AudioPilot®) circuit.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• SWITCH CONN [U1240]</li> </ul>	<ul style="list-style-type: none"> <li>• Multifunction switch power supply and ground circuit malfunction is detected.</li> <li>• Malfunction is detected in AV communication circuit between AV control unit and multifunction switch.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and multifunction switch.</li> </ul>	<ul style="list-style-type: none"> <li>• Multifunction switch power supply and ground circuit.</li> <li>• AV communication circuit between AV control unit and multifunction switch.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• AMP CONN [U124E]</li> </ul>	BOSE amp. power supply and ground circuits are malfunctioning.	BOSE amp. power supply and ground circuits.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> </ul>	Camera control unit power supply and ground circuits malfunction is detected.	Camera control unit power supply and ground circuits.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• iPod CONN [U1254]</li> </ul>	<ul style="list-style-type: none"> <li>• iPod adapter power supply and ground circuit malfunction is detected.</li> <li>• Malfunction is detected in AV communication circuit between multifunction switch and iPod adapter.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and iPod adapter.</li> </ul>	<ul style="list-style-type: none"> <li>• iPod adapter power supply and ground circuit.</li> <li>• AV communication circuit between multifunction switch and iPod adapter.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• HAND FREE CONN [U1256]</li> </ul>	<ul style="list-style-type: none"> <li>• TEL adapter unit power supply and ground circuit malfunction is detected.</li> <li>• Malfunction is detected in AV communication circuit between BOSE amp. and camera control unit.</li> <li>• Malfunction is detected in AV communication circuit between camera control unit and TEL adapter unit.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and TEL adapter unit.</li> </ul>	<ul style="list-style-type: none"> <li>• TEL adapter unit power supply and ground circuit.</li> <li>• AV communication circuit between BOSE amp. and camera control unit.</li> <li>• AV communication circuit between camera control unit and TEL adapter unit.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> <li>• HAND FREE CONN [U1256]</li> </ul>	Malfunction is detected in AV communication circuit between BOSE amp. and camera control unit.	AV communication circuit between BOSE amp. and camera control unit.

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> <li>• HAND FREE CONN [U1256]</li> <li>• AMP CONN [U124E]</li> </ul>	Malfunction is detected in AV communication circuit between iPod adapter and BOSE amp.	AV communication circuit between iPod adapter and BOSE amp.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> <li>• IPod CONN [U1254]</li> <li>• HAND FREE CONN [U1256]</li> <li>• AMP CONN [U124E]</li> </ul>	Malfunction is detected in AV communication circuit between AV control unit and iPod adapter.	AV communication circuit between AV control unit and iPod adapter.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• SWITCH CONN [U1240]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> <li>• IPod CONN [U1254]</li> <li>• HAND FREE CONN [U1256]</li> <li>• AMP CONN [U124E]</li> </ul>	Malfunction is detected in AV communication circuit between AV control unit and multifunction switch.	AV communication circuit between AV control unit and multifunction switch.

## DATA MONITOR

### ALL SIGNALS

- Displays the status of the following vehicle signals inputted into the AV control unit.
- For each signal, actual signal can be compared with the condition recognized on the system.

Display Item	Display	Vehicle status	Remarks	
VHCL SPD SIG	On	Vehicle speed >0 km/h (0 MPH)	Changes in indication may be delayed. This is normal.	
	Off	Vehicle speed =0 km/h (0 MPH)		
PKB SIG	On	Parking brake is applied.		
	Off	Parking brake is released.		
ILLUM SIG	On	Light switch ON		—
	Off	Light switch OFF		
IGN SIG	On	Ignition switch ON		
	Off	Ignition switch in ACC position		
REV SIG	On	Shift the selector lever to "R" position	Changes in indication may be delayed. This is normal.	
	Off	Shift the selector lever other than "R" position		

### SELECTION FROM MENU

Allows the technician to select which vehicle signals should be displayed and displays the status of the selected vehicle signals.

Item to be selected	Description
VHCL SPD SIG	The same as when "ALL SIGNALS" is selected.
PKB SIG	
ILLUM SIG	
IGN SIG	
REV SIG	

AV

# DIAGNOSIS SYSTEM (TEL ADAPTER UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITHOUT NAVIGATION]

## DIAGNOSIS SYSTEM (TEL ADAPTER UNIT)

### Diagnosis Description

INFOID:000000004371587

#### HANDS-FREE PHONE SYSTEM ON BOARD DIAGNOSIS

During on board diagnosis the diagnosis function of TEL adapter unit starts with the operation of the steering switch and performs the diagnosis when ignition switch ACC.

On board diagnosis item

The on board diagnosis has 3 modes: the self-diagnosis mode that performs the trouble diagnosis, the speaker adaptation data deleting mode and the hands-free phone system initialization mode.

#### **CAUTION:**

- Perform the diagnosis with the vehicle stopped.
- Perform STEP2 if necessary.

STEP	MODE	Description
STEP1	Self-diagnosis	The self-diagnosis mode performs the microphone test and the diagnosis of TEL adapter unit, TEL antenna and steering unit, and then reads out the results with the sound.
STEP2	Speaker adaptation data deleting	The speaker adaptation data deleting mode can delete the speaker adaptation data.
	Hands-free phone system initialization	Hands-free phone system initialization mode can perform the initialization of hands-free phone system.

#### Self-diagnosis results

Self-diagnosis mode reads out the self-diagnosis results.

#### **NOTE:**

- Error count is read out simultaneously when reading out the DTC name.
- The errors are read out continuously when some errors occur at the same time.

#### Self-diagnosis results

DTC	DTC name	Possible causes
DTC 10000	INTERNAL FAILURE	TEL adapter unit
DTC 01000	ANT. SHORT TO BATT OR OPEN	TEL antenna
DTC 00100	ANT. SHORT TO GROUND	
DTC 00010	STEERING REMOTE BUTTON STUCK A	Steering switch
DTC 00001	STEERING REMOTE BUTTON STUCK B	
DTC 00000	THERE ARE NO FAILURE RECORDS TO REPORT	—

The details of error count

The error count guides "0" when the error occurs. The next time it counts up "1" if it is normal with the ignition switch ON. It continues the count up unless the initialization of hands-free phone system is performed.

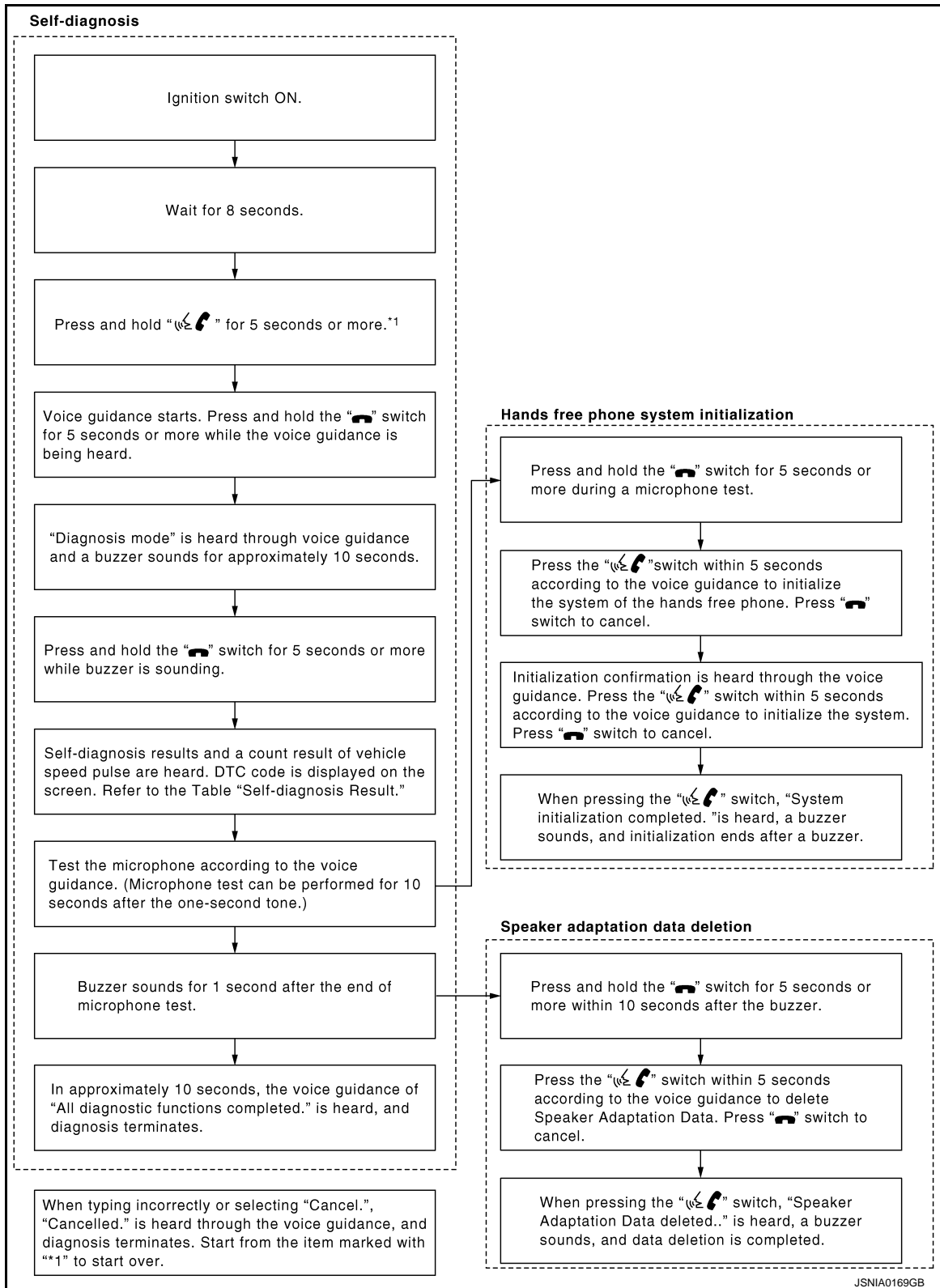


# DIAGNOSIS SYSTEM (TEL ADAPTER UNIT)

[BOSE AUDIO WITHOUT NAVIGATION]

< SYSTEM DESCRIPTION >

## FLOW CHART OF TROUBLE DIAGNOSIS



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# U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## DTC/CIRCUIT DIAGNOSIS

### U1000 CAN COMM CIRCUIT

#### Description

INFOID:000000004929305

CAN (Controller Area Network) is a serial communication line for real-time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independently). In CAN communication, control units are connected with 2 communication lines (CAN-H, CAN-L) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Signal Chart. Refer to [LAN-25, "CAN System Specification Chart"](#).

#### DTC Logic

INFOID:000000004929306

#### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	Diagnostic item is detected when ...	Probable malfunction location
U1000	CAN COMM CIRCUIT	AV control unit is not transmitting or receiving CAN communication signal for 2 seconds or more.	CAN communication system.

#### Diagnosis Procedure

INFOID:000000004929307

#### 1. PERFORM SELF-DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check "Self Diagnostic Result" of "MULTI AV".

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to "LAN system". Refer to [LAN-16, "Trouble Diagnosis Flow Chart"](#).  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

# U1010 CONTROL UNIT (CAN)

[BOSE AUDIO WITHOUT NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

## U1010 CONTROL UNIT (CAN)

### Description

INFOID:000000004929308

Initial diagnosis of AV control unit.

### DTC Logic

INFOID:000000004929309

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	Diagnostic item is detected when ...	Probable malfunction location
U1010	CONTROL UNIT (CAN)	CAN initial diagnosis malfunction is detected.	AV control unit.

### Diagnosis Procedure

INFOID:000000004929310

#### 1. REPLACE AV CONTROL UNIT

When DTC U1010 is detected, replace AV control unit.

>> INSPECTION END

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# U1310 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1310 AV CONTROL UNIT

### Description

INFOID:000000004931023

Replace the AV control unit if this DTC is displayed. Refer to [AV-454, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• AV control unit includes audio function and vehicle information function.</li><li>• It is connected to ECM and unified meter and A/C amp via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li><li>• Auxiliary image signal and auxiliary sound signal are input from the auxiliary input jacks.</li></ul>

### DTC Logic

INFOID:000000004929312

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1310	CONTROL UNIT (AV) [U1310]	An initial diagnosis error is detected in AV communication circuit.	Replace AV control unit.

# U1200 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1200 AV CONTROL UNIT

### Description

INFOID:000000005184631

Replace the AV control unit if this DTC is displayed. Refer to [AV-454, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004929314

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1200	Cont Unit FLASH-ROM [U1200]	An internal malfunction is detected in AV control unit (FLASH-ROM).	Replace AV control unit.

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# U1216 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1216 AV CONTROL UNIT

### Description

INFOID:000000004931027

Replace the AV control unit if this DTC is displayed. Refer to [AV-454, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• AV control unit includes audio function and vehicle information function.</li><li>• It is connected to ECM and unified meter and A/C amp via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li><li>• Auxiliary image signal and auxiliary sound signal are input from the auxiliary input jacks.</li></ul>

### DTC Logic

INFOID:000000004929318

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1216	CAN CONT [U1216]	Internal malfunction of AV control unit (CAN controller) is detected.	Replace AV control unit.

# U1231 BOSE AMP.

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1231 BOSE AMP.

### Description

INFOID:000000005136718

Replace the BOSE amp. if this DTC is displayed. Refer to [AV-462. "Exploded View"](#).

Part name	Description
BOSE AMP.	Inputs power (amp. ON) and sound signal from AV control unit and, and outputs sound signal to each speaker.

### DTC Logic

INFOID:000000005136719

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1231	AMP TEMP [U1231]	Internal malfunction of BOSE amp. is detected.	Replace BOSE amp.

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# U1243 DISPLAY UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1243 DISPLAY UNIT

### Description

INFOID:000000005184873

Part name	Description
DISPLAY UNIT	<ul style="list-style-type: none"> <li>• Display image is controlled by the serial communication from AV control unit.</li> <li>• RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing).</li> <li>• Synchronizing signal (HP, VP) is output to AV control unit.</li> <li>• Auxilliary image signal and camera image signal are input from AV control unit.</li> </ul>

### DTC Logic

INFOID:000000005129661

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1243	FRONT DISP CONN [U1243]	<ul style="list-style-type: none"> <li>• Display unit power supply and ground circuit malfunction is detected</li> <li>• Malfunction is detected in communication circuit between AV control unit and display unit</li> <li>• Malfunction is detected in communication signal between AV control unit and display unit</li> </ul>	<ul style="list-style-type: none"> <li>• Display unit power supply and ground circuit.</li> <li>• Communication circuit between AV control unit and display unit.</li> </ul>

### Diagnosis Procedure

INFOID:000000005129662

#### 1. CHECK DISPLAY UNIT POWER SUPPLY AND GROUND CIRCUIT

Check display unit power supply and ground circuit. Refer to [AV-236. "DISPLAY UNIT : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

#### 2. CHECK CONTINUITY COMMUNICATION CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminals	Connector	Terminals	
M71	11	M83	56	Existed
	22		44	

4. Check continuity between display unit harness connector and ground.

Display unit		Ground	Continuity
Connector	Terminals		
M71	11		Not existed
	22		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

#### 3. CHECK COMMUNICATION SIGNAL

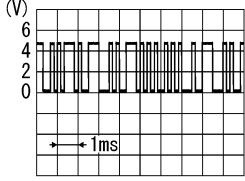
1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.



# U1243 DISPLAY UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	11	Ground	When adjusting display brightness.	 <p>PKIB5039J</p>

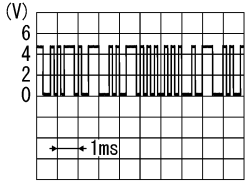
Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

## 4. CHECK COMMUNICATION SIGNAL

Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	22	Ground	When adjusting display brightness.	 <p>PKIB5039J</p>

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace display unit.

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AV

# U1250 CAMERA CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1250 CAMERA CONTROL UNIT

### Description

INFOID:000000005129663

Part name	Description
CAMERA CONTROL UNIT	<ul style="list-style-type: none"><li>• Camera image signal is input from rear view camera, and camera image is indicated on the display.</li><li>• Power (camera ON signal) is transmitted to rear view camera.</li><li>• Controlled by AV communication transmitted from AV control unit.</li><li>• AV control unit recognizes the presence of camera system with camera connection recognition signal.</li></ul>

### DTC Logic

INFOID:000000005129664

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1250	CAMERA CONT. CONN [U1250]	Malfunction is detected in camera connection recognition signal circuit.	Camera connection recognition signal circuit.

### Diagnosis Procedure

INFOID:000000005129665

#### 1. CHECK CAMERA CONNECTION RECOGNITION SIGNAL CIRCUIT

1. Disconnect AV control unit connector and camera control unit connector.
2. Check continuity between AV control unit harness connector and camera control unit harness connector.

AV control unit		Camera control unit		Continuity
Connector	Terminal	Connector	Terminal	
M84	68	B241	14	Existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK AV CONTROL UNIT VOLTAGE

1. Connect AV control unit connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit harness connector and ground.

(+)		(-)	Voltage (Approx.)
AV control unit			
Connector	Terminal		
M84	68	Ground	5.0 V

Is the inspection result normal?

- YES >> Replace camera control unit.  
NO >> Replace AV control unit.

# U1255 SATELLITE RADIO TUNER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1255 SATELLITE RADIO TUNER

### Description

INFOID:000000005129738

Part name	Description
SATELLITE RADIO TUNER	<ul style="list-style-type: none"> <li>Inputs the satellite radio signal from satellite radio antenna and outputs it to the AV control unit.</li> <li>It is controlled with the communication (communication signal, request signal) from AV control unit.</li> </ul>

### DTC Logic

INFOID:000000005129739

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1255	SAT CONN [U1255]	<ul style="list-style-type: none"> <li>Satellite radio tuner power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in communication circuit between AV control unit and satellite radio tuner.</li> <li>Malfunction is detected in communication signal between AV control unit and satellite radio tuner.</li> <li>Malfunction is detected in request signal circuit between AV control unit and satellite radio tuner.</li> </ul>	<ul style="list-style-type: none"> <li>Satellite radio tuner power supply and ground circuit.</li> <li>Communication circuit between AV control unit and satellite radio tuner.</li> <li>Request signal circuit between AV control unit and satellite radio tuner.</li> </ul>

### Diagnosis Procedure

INFOID:000000005129740

#### 1. CHECK SATELLITE RADIO TUNER POWER SUPPLY AND GROUND CIRCUIT

Check satellite radio tuner power supply and ground circuit. Refer to [AV-239, "SATELLITE RADIO TUNER : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

#### 2. CHECK CONTINUITY COMMUNICATION CIRCUIT AND REQUEST SIGNAL CIRCUIT

- Turn ignition switch OFF.
- Disconnect AV control unit connector and satellite radio tuner connector.
- Check continuity between AV control unit harness connector and satellite radio tuner harness connector.

AV control unit		Satellite radio tuner		Continuity
Connector	Terminals	Connector	Terminals	
M82	28	B236	8	Existed
	29		9	
	30		10	

- Check continuity between AV control unit harness connector.

AV control unit		Ground	Continuity
Connector	Terminals		
M82	28	Ground	Not existed
	29		
	30		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

# U1255 SATELLITE RADIO TUNER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## 3. CHECK AV CONTROL UNIT VOLTAGE

1. Connect AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between AV control unit harness connector and ground.

(+)		(-)	Reference value (Approx.)
AV control unit			
Connector	Terminals		
M82	28	Ground	
	29	Ground	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

## 4. CHECK SATELLITE RADIO TUNER

1. Turn ignition switch OFF.
2. Disconnect AV control unit connector.
3. Connect satellite radio tuner.
4. Turn ignition switch ON.
5. Check signal between satellite radio tuner harness connector and ground.

(+)		(-)	Reference value (Approx.)
Satellite radio tuner			
Connector	Terminal		
B236	10	Ground	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace satellite radio tuner.

# U1260, U1261, U1262, U1263 CENTER SPEAKER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1260, U1261, U1262, U1263 CENTER SPEAKER

### Description

INFOID:000000005136734

Part name	Description
CENTER SPEAKER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs sound (mid range).</li></ul>

### DTC Logic

INFOID:000000005136735

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1260	CENTER SP OPEN [U1260]	Sound signal center speaker circuit is open.	Check sound signal center speaker circuit.
U1261	CENTER SP SHORT [U1261]	Sound signal center speaker circuit is shorted between center speaker signal (+) and center speaker signal (-).	Check sound signal center speaker circuit.
U1262	CENTER SP GND-SHORT [U1262]	Sound signal center speaker circuit to ground is shorted.	Check sound signal center speaker circuit.
U1263	CENTER SP VB-SHORT [U1263]	Sound signal center speaker circuit to battery is shorted.	Check sound signal center speaker circuit.

### Diagnosis Procedure

INFOID:000000005136736

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal center speaker circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

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AV

**U1264, U1265, U1266, U1267 FRONT RIGHT TWEETER/RIGHT SQUAWKER**  
**[BOSE AUDIO WITHOUT NAVIGATION]**

< DTC/CIRCUIT DIAGNOSIS >

**U1264, U1265, U1266, U1267 FRONT RIGHT TWEETER/RIGHT SQUAWKER**

**Description**

INFOID:000000005136737

Part name	Description
TWEETER	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs sound (high range).</li> </ul>
SQUAWKER	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs sound (high and mid range).</li> </ul>

**DTC Logic**

INFOID:000000005136738

**DTC DETECTION LOGIC**

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1264	FR-DOOR SP OPEN [U1264]	Sound signal front speaker RH circuit is open.	Check sound signal front speaker RH circuit.
U1265	FR-DOOR SP SHORT [U1265]	Sound signal front speaker RH circuit is shorted between front speaker RH signal (+) and front speaker RH signal (-).	Check sound signal front speaker RH circuit.
U1266	FR-DOOR SP GND-SHORT [U1266]	Sound signal front speaker RH circuit to ground is shorted.	Check sound signal front speaker RH circuit.
U1267	FR-DOOR SP VB-SHORT [U1267]	Sound signal front speaker RH circuit to battery is shorted.	Check sound signal front speaker RH circuit.

**Diagnosis Procedure**

INFOID:000000005136739

**1. PERFORM THE SELF-DIAGNOSIS**

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

**Is any DTC detected?**

- YES >> Repair sound signal front speaker RH circuit harness or connector.  
 NO >> Refer to GI section. Refer to [GI-36. "Intermittent Incident"](#).

# U1268, U1269, U126A, U126B FRONT RIGHT DOOR WOOFER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1268, U1269, U126A, U126B FRONT RIGHT DOOR WOOFER

### Description

INFOID:000000005136740

Part name	Description
DOOR WOOFER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs low-pitched sound.</li></ul>

### DTC Logic

INFOID:000000005136741

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1268	RR-SP/FR-WOOFER OPEN [U1268]	Sound signal door woofer RH circuit is open.	Check sound signal door woofer RH circuit.
U1269	RR-SP/FR-WOOFER SHORT [U1269]	Sound signal door woofer RH circuit is shorted between door woofer RH signal (+) and door woofer RH signal (-).	Check sound signal door woofer RH circuit.
U126A	RR-SP/FR-WOOFER GND- SHORT [U126A]	Sound signal door woofer RH circuit to ground is shorted.	Check sound signal door woofer RH circuit.
U126B	RR-SP/FR-WOOFER VB-SHORT [U126B]	Sound signal door woofer RH circuit to battery is shorted.	Check sound signal door woofer RH circuit.

### Diagnosis Procedure

INFOID:000000005136742

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal door woofer RH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

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# U126C, U126D, U126E, U126F REAR RIGHT WOOFER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U126C, U126D, U126E, U126F REAR RIGHT WOOFER

### Description

INFOID:000000005136743

Part name	Description
REAR WOOFER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs low-pitched sound.</li></ul>

### DTC Logic

INFOID:000000005136744

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U126C	RR-SURROUND SP OPEN [U126C]	Sound signal rear woofer RH circuit is open.	Check sound signal rear woofer RH circuit.
U126D	RR-SURROUND SP SHORT [U126D]	Sound signal rear woofer RH circuit is shorted between rear woofer RH signal (+) and rear woofer RH signal (-).	Check sound signal rear woofer RH circuit.
U126E	RR-SURROUND SP GND- SHORT [U126E]	Sound signal rear woofer RH circuit to ground is shorted.	Check sound signal rear woofer RH circuit.
U126F	RR-SURROUND SP VB-SHORT [U126F]	Sound signal rear woofer RH circuit to battery is shorted.	Check sound signal rear woofer RH circuit.

### Diagnosis Procedure

INFOID:000000005136745

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal rear woofer RH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).



# U1274, U1275, U1276, U1277 REAR LEFT WOOFER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1274, U1275, U1276, U1277 REAR LEFT WOOFER

### Description

INFOID:000000005136746

Part name	Description
REAR WOOFER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs low-pitched sound.</li></ul>

### DTC Logic

INFOID:000000005136747

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1274	RL-SURROUND SP OPEN [U1274]	Sound signal rear woofer LH circuit is open.	Check sound signal rear woofer LH circuit.
U1275	RL-SURROUND SP SHORT [U1275]	Sound signal rear woofer LH circuit is shorted between rear woofer LH signal (+) and rear woofer LH signal (-).	Check sound signal rear woofer LH circuit.
U1276	RL-SURROUND SP GND- SHORT [U1276]	Sound signal rear woofer LH circuit to ground is shorted.	Check sound signal rear woofer LH circuit.
U1277	RL-SURROUND SP VB-SHORT [U1277]	Sound signal rear woofer LH circuit to battery is shorted.	Check sound signal rear woofer LH circuit.

### Diagnosis Procedure

INFOID:000000005136748

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal rear woofer LH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

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# U1278, U1279, U127A, U127B FRONT LEFT DOOR WOOFER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1278, U1279, U127A, U127B FRONT LEFT DOOR WOOFER

### Description

INFOID:000000005136749

Part name	Description
DOOR WOOFER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs low-pitched sound.</li></ul>

### DTC Logic

INFOID:000000005136750

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1278	RL- SP/FL-WOOFER OPEN [U1278]	Sound signal door woofer LH circuit is open.	Check sound signal door woofer LH circuit.
U1279	RL- SP/FL-WOOFER SHORT [U1279]	Sound signal door woofer LH circuit is shorted between door woofer LH signal (+) and door woofer LH signal (-).	Check sound signal door woofer LH circuit.
U127A	RL- SP/FL-WOOFER GND- SHORT [U127A]	Sound signal door woofer LH circuit to ground is shorted.	Check sound signal door woofer LH circuit.
U127B	RL- SP/FL-WOOFER VB-SHORT [U127B]	Sound signal door woofer LH circuit to battery is shorted.	Check sound signal door woofer LH circuit.

### Diagnosis Procedure

INFOID:000000005136751

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal door woofer LH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

**U127C, U127D, U127E, U127F FRONT LEFT TWEETER/LEFT SQUAWKER**  
 < DTC/CIRCUIT DIAGNOSIS > **[BOSE AUDIO WITHOUT NAVIGATION]**

**U127C, U127D, U127E, U127F FRONT LEFT TWEETER/LEFT SQUAWKER**

**Description**

INFOID:000000005136752

Part name	Description
TWEETER	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs sound (high range).</li> </ul>
SQUAWKER	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs sound (high and mid range).</li> </ul>

**DTC Logic**

INFOID:000000005136753

**DTC DETECTION LOGIC**

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U127C	FL- DOOR SP OPEN [U127C]	Sound signal front speaker LH circuit is open.	Check sound signal front speaker LH circuit.
U127D	FL- DOOR SP SHORT [U127D]	Sound signal front speaker LH circuit is shorted between front speaker LH signal (+) and front speaker LH signal (-).	Check sound signal front speaker LH circuit.
U127E	FL- DOOR SP GND-SHORT [U127E]	Sound signal front speaker LH circuit to ground is shorted.	Check sound signal front speaker LH circuit.
U127F	FL- DOOR SP VB-SHORT [U127F]	Sound signal front speaker LH circuit to battery is shorted.	Check sound signal front speaker LH circuit.

**Diagnosis Procedure**

INFOID:000000005136754

**1. PERFORM THE SELF-DIAGNOSIS**

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

**Is any DTC detected?**

- YES >> Repair sound signal front speaker LH circuit harness or connector.  
 NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

AV

# U1280, U1281, U1282, U1283 DRIVER HEADREST LEFT SPEAKER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1280, U1281, U1282, U1283 DRIVER HEADREST LEFT SPEAKER

### Description

INFOID:000000005136720

Part name	Description
HEADREST SPEAKER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs mid range sound.</li></ul>

### DTC Logic

INFOID:000000005136721

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1280	FL-SEAT L-SP OPEN [U1280]	Sound signal driver headrest speaker LH circuit is open.	Check sound signal driver headrest speaker LH circuit.
U1281	FL-SEAT L-SP SHORT [U1281]	Sound signal driver headrest speaker LH circuit is shorted between driver headrest speaker LH signal (+) and driver headrest speaker LH signal (-).	Check sound signal driver headrest speaker LH circuit.
U1282	FL-SEAT L-SP GND-SHORT [U1282]	Sound signal driver headrest speaker LH circuit to ground is shorted.	Check sound signal driver headrest speaker LH circuit.
U1283	FL-SEAT L-SP VB-SHORT [U1283]	Sound signal driver headrest speaker LH circuit to battery is shorted.	Check sound signal driver headrest speaker LH circuit.

### Diagnosis Procedure

INFOID:000000005136722

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal driver headrest speaker LH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

# U1284, U1285, U1286, U1287 DRIVER HEADREST RIGHT SPEAKER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1284, U1285, U1286, U1287 DRIVER HEADREST RIGHT SPEAKER

### Description

INFOID:000000005136723

Part name	Description
HEADREST SPEAKER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs mid range sound.</li></ul>

### DTC Logic

INFOID:000000005136724

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1284	FL-SEAT R-SP OPEN [U1284]	Sound signal driver headrest speaker RH circuit is open.	Check sound signal driver headrest speaker RH circuit.
U1285	FL-SEAT R-SP SHORT [U1285]	Sound signal driver headrest speaker RH circuit is shorted between driver headrest speaker RH signal (+) and driver headrest speaker RH signal (-).	Check sound signal driver headrest speaker RH circuit.
U1286	FL-SEAT R-SP GND-SHORT [U1286]	Sound signal driver headrest speaker RH circuit to ground is shorted.	Check sound signal driver headrest speaker RH circuit.
U1287	FL-SEAT R-SP VB-SHORT [U1287]	Sound signal driver headrest speaker RH circuit to battery is shorted.	Check sound signal driver headrest speaker RH circuit.

### Diagnosis Procedure

INFOID:000000005136725

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal center speaker circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

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# U1288, U1289, U128A, U128B PASSENGER HEADREST LEFT SPEAKER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1288, U1289, U128A, U128B PASSENGER HEADREST LEFT SPEAKER

### Description

INFOID:000000005136726

Part name	Description
HEADREST SPEAKER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs mid range sound.</li></ul>

### DTC Logic

INFOID:000000005136727

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1288	FR-SEAT L-SP OPEN [U1288]	Sound signal passenger headrest speaker LH circuit is open.	Check sound signal passenger headrest speaker LH circuit.
U1289	FR-SEAT L-SP SHORT [U1289]	Sound signal passenger headrest speaker LH circuit is shorted between passenger headrest speaker LH signal (+) and passenger headrest speaker LH signal (-).	Check sound signal passenger headrest speaker LH circuit.
U128A	FR-SEAT L-SP GND-SHORT [U128A]	Sound signal passenger headrest speaker LH circuit to ground is shorted.	Check sound signal passenger headrest speaker LH circuit.
U128B	FR-SEAT L-SP VB-SHORT [U128B]	Sound signal passenger headrest speaker LH circuit to battery is shorted.	Check sound signal passenger headrest speaker LH circuit.

### Diagnosis Procedure

INFOID:000000005136728

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal passenger headrest speaker LH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

**U128C, U128D, U128E, U128F PASSENGER HEADREST RIGHT SPEAKER**  
 < DTC/CIRCUIT DIAGNOSIS > **[BOSE AUDIO WITHOUT NAVIGATION]**

**U128C, U128D, U128E, U128F PASSENGER HEADREST RIGHT SPEAKER**

**Description**

INFOID:000000005136729

Part name	Description
HEADREST SPEAKER	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs mid range sound.</li> </ul>

**DTC Logic**

INFOID:000000005136730

**DTC DETECTION LOGIC**

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U128C	FR-SEAT R-SP OPEN [U128C]	Sound signal passenger headrest speaker RH circuit is open.	Check sound signal passenger headrest speaker RH circuit.
U128D	FR-SEAT R-SP SHORT [U128D]	Sound signal passenger headrest speaker RH circuit is shorted between passenger headrest speaker RH signal (+) and passenger headrest speaker RH signal (-).	Check sound signal passenger headrest speaker RH circuit.
U128E	FR-SEAT R-SP GND-SHORT [U128E]	Sound signal passenger headrest speaker RH circuit to ground is shorted.	Check sound signal passenger headrest speaker RH circuit.
U128F	FR-SEAT R-SP VB-SHORT [U128F]	Sound signal passenger headrest speaker RH circuit to battery is shorted.	Check sound signal passenger headrest speaker RH circuit.

**Diagnosis Procedure**

INFOID:000000005136731

**1. PERFORM THE SELF-DIAGNOSIS**

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

**Is any DTC detected?**

- YES >> Repair sound signal driver headrest speaker LH circuit harness or connector.  
 NO >> Refer to GI section. Refer to [GI-36. "Intermittent Incident"](#).

AV

# U1290, U1291, U1292, U1293 AUDIOPILOT™ MICROPHONE

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1290, U1291, U1292, U1293 AUDIOPILOT™ MICROPHONE

### Description

INFOID:000000005136732

Part name	Description
MICROPHONE (for AudioPilot®)	<ul style="list-style-type: none"><li>Used for AudioPilot®</li><li>Mic.signal is transmitted to BOSE amp.</li></ul>

### DTC Logic

INFOID:000000005184865

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1290	CORRECT MICRO OPEN [U1290]	Mic. signal (for AudioPilot®) circuit is open.	Check Mic. signal (for Audiopilot®) circuit.
U1291	CORRECT MICRO SHORT [U1291]	Mic. signal (for AudioPilot®) circuit is shorted between MIC.signal (for AudioPilot®) (+) and MIC.signal (for AudioPilot®) (-).	Check Mic. signal (for Audiopilot®) circuit.
U1292	CORRECT MICRO GND-SHORT [U1292]	Mic. signal (for AudioPilot®) circuit to ground is shorted.	Check Mic. signal (for Audiopilot®) circuit.
U1293	CENTER SP VB-SHORT [U1293]	Mic. signal (for AudioPilot®) circuit to battery is shorted.	Check Mic. signal (for Audiopilot®) circuit.

### Diagnosis Procedure

INFOID:000000005136733

#### 1. CHECK CONTINUITY BETWEEN BOSE AMP. AND MICROPHONE FOR AUDIOPILOT® CIRCUIT

- Turn ignition switch OFF.
- Disconnect BOSE amp. connector and microphone for AudioPilot® connector.
- Check continuity between BOSE amp. harness connector and microphone for AudioPilot® harness connector.

BOSE amp.		Microphone for AudioPilot®		Continuity
Connector	Terminals	Connector	Terminals	
B41	31	B617	81	Existed
	11		82	

- Check continuity between BOSE amp. harness connector and ground.

BOSE amp.		Ground	Continuity
Connector	Terminals		
B41	31		Not existed
	11		

#### Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK MICROPHONE SIGNAL

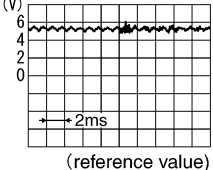
- Connect BOSE amp. connector and microphone for AudioPilot® connector.
- Check signal between BOSE amp. harness connector.



# U1290, U1291, U1292, U1293 AUDIOPILOT™ MICROPHONE

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

(+)		(-)		Condition	Reference value
BOSE amp.		BOSE amp.			
Connector	Terminal	Connector	Terminal		
B41	31	B41	11	When inputting noise.	 <p>(reference value) PKIA2104E</p>

Is the inspection result normal?

YES >> Replace BOSE amp.

NO >> Replace microphone for AudioPilot®.

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# U1300 AV COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## U1300 AV COMM CIRCUIT

### Description

INFOID:000000004929346

U1300 is indicated when malfunction occurs in communication signal of multi AV system. Indicated simultaneously, without fail, with the malfunction of control units connected to AV control unit with communication line. Determine the possible malfunction cause from the table below.

### SELF-DIAGNOSIS RESULTS DISPLAY ITEM

DTC	Display contents of CONSULT-III	Description	Possible malfunction factor/Action to take
U1300 U1240	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>SWITCH CONN [U1240]</li> </ul>	<ul style="list-style-type: none"> <li>Multifunction switch power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in AV communication circuit between AV control unit and multifunction switch.</li> <li>Malfunction is detected in AV communication signal between AV control unit and multifunction switch.</li> </ul>	<ul style="list-style-type: none"> <li>Multifunction switch power supply and ground circuit.</li> <li>AV communication circuit between AV control unit and multifunction switch.</li> </ul>
U1300 U124E	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>AMP CONN [U124E]</li> </ul>	BOSE amp. power supply and ground circuits are malfunctioning.	BOSE amp. power supply and ground circuits.
U1300 U1252	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>REAR CAMERA LAN CONN [U1252]</li> </ul>	Camera control unit power supply and ground circuits malfunction is detected.	Camera control unit power supply and ground circuits.
U1300 U1254	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>IPOD CONN [U1254]</li> </ul>	<ul style="list-style-type: none"> <li>iPod adapter power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in AV communication circuit between multifunction switch and iPod adapter.</li> <li>Malfunction is detected in AV communication signal between AV control unit and iPod adapter.</li> </ul>	<ul style="list-style-type: none"> <li>iPod adapter power supply and ground circuit.</li> <li>AV communication circuit between multifunction switch and iPod adapter.</li> </ul>
U1300 U1256	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>HAND FREE CONN [U1256]</li> </ul>	<ul style="list-style-type: none"> <li>TEL adapter unit power supply and ground circuit malfunction is detected.</li> <li>Malfunction is detected in AV communication circuit between BOSE amp. and camera control unit.</li> <li>Malfunction is detected in AV communication circuit between camera control unit and TEL adapter unit.</li> <li>Malfunction is detected in AV communication signal between AV control unit and TEL adapter unit.</li> </ul>	<ul style="list-style-type: none"> <li>TEL adapter unit power supply and ground circuit.</li> <li>AV communication circuit between BOSE amp. and camera control unit.</li> <li>AV communication circuit between camera control unit and TEL adapter unit.</li> </ul>
U1300 U1252 U1246	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>HAND FREE CONN [U1256]</li> </ul>	Malfunction is detected in AV communication circuit between BOSE amp. and camera control unit.	AV communication circuit between BOSE amp. and camera control unit.
U1300 U1252 U1256 U124E	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>HAND FREE CONN [U1256]</li> <li>AMP CONN [U124E]</li> </ul>	Malfunction is detected in AV communication circuit between iPod adapter and BOSE amp.	AV communication circuit between iPod adapter and BOSE amp.

# U1300 AV COMM CIRCUIT

[BOSE AUDIO WITHOUT NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

DTC	Display contents of CONSULT-III	Description	Possible malfunction factor/Action to take
U1300 U1252 U1254 U1256 U124E	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> <li>• IPOD CONN [U1254]</li> <li>• HAND FREE CONN [U1256]</li> <li>• AMP CONN [U124E]</li> </ul>	Malfunction is detected in AV communication circuit between AV control unit and iPod adapter.	AV communication circuit between AV control unit and iPod adapter.
U1300 U1240 U1252 U1254 U1256 U124E	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• SWITCH CONN [U1240]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> <li>• IPOD CONN [U1254]</li> <li>• HAND FREE CONN [U1256]</li> <li>• AMP CONN [U124E]</li> </ul>	Malfunction is detected in AV communication circuit between AV control unit and multifunction switch.	AV communication circuit between AV control unit and multifunction switch.

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# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## POWER SUPPLY AND GROUND CIRCUIT

### AV CONTROL UNIT

#### AV CONTROL UNIT : Diagnosis Procedure

INFOID:000000005129693

#### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19
Ignition switch ON or START	3

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

#### 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between AV control unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	M81	19	OFF	Battery voltage
	M82	22		
		24		
ACC power supply	M81	7	ACC	Battery voltage
	M82	25		
Ignition signal	M85	104	ON	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between AV control unit and fuse.

#### 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect AV control unit connectors.
3. Check continuity between AV control unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M81	8	OFF	Existed
		17		
		20		
	M85	85		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## DISPLAY UNIT

#### DISPLAY UNIT : Diagnosis Procedure

INFOID:000000005129790

#### 1.CHECK POWER SUPPLY CIRCUIT (DISPLAY SIDE)

Check voltage between display unit harness connector and ground.

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Inverter VCC	M71	2	ACC	9.0 V
Signal VCC		3		

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

## 2.CHECK POWER SUPPLY CIRCUIT (CONTINUITY)

1. Turn ignition switch OFF.
2. Disconnect the harness connector between display unit and AV control unit.
3. Check continuity between display unit harness connector M71 and AV control unit harness connector M83.

Signal name	Display unit (M71)	AV control unit (M83)	Continuity
Inverter VCC	2	59	Existed
Signal VCC	3	47	Existed

4. Check continuity between display unit harness connector M71 and ground.

Signal name	Display unit (M71)	—	Continuity
Inverter VCC	2	Ground	Not existed
Signal VCC	3	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

## 3.CHECK POWER SUPPLY CIRCUIT (AV CONTROL UNIT SIDE)

1. Connect the AV control unit harness connector.
2. Turn ignition switch ACC.
3. Check voltage between AV control unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Inverter VCC	M83	59	ACC	9 V
Signal VCC		47		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replacement of AV control unit.

## 4.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector.
3. Check continuity between display unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M71	1	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## MULTIFUNCTION SWITCH

### MULTIFUNCTION SWITCH : Diagnosis Procedure

INFOID:000000005129695

## 1.CHECK FUSE

Check for blown fuses.

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AV

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

Power source	Fuse No.
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

## 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between multifunction switch harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
ACC power supply	M72	3	ACC	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between multifunction switch and fuse.

## 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect multifunction switch connector.
3. Check continuity between multifunction switch harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M72	1	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## CAMERA CONTROL UNIT

### CAMERA CONTROL UNIT : Diagnosis Procedure

INFOID:000000005129696

## 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

## 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between camera control unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	B241	32	OFF	Battery voltage
ACC power supply	B241	30	ACC	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between camera control unit and fuse.

## 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector.
3. Check continuity between camera control unit harness connector and ground.

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B241	31	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## SATELLITE RADIO TUNER

### SATELLITE RADIO TUNER : Diagnosis Procedure

INFOID:000000004371613

#### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

#### 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between satellite radio tuner harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	B236	12	OFF	Battery voltage
ACC power supply	B236	16	ACC	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between satellite radio tuner and fuse.

#### 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect satellite radio tuner.
3. Check continuity between satellite radio tuner harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B236	15	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## BOSE AMP.

### BOSE AMP. : Diagnosis Procedure

INFOID:000000005129697

#### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	5, 8
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

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# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between BOSE amp. harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	B42	50	OFF	Battery voltage
		51		
ACC power supply	B41	16	ACC	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between BOSE amp. and fuse.

## 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BOSE amp. connector.
3. Check continuity between BOSE amp. harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B42	47	OFF	Existed
		52		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## iPod ADAPTER

### iPod ADAPTER : Diagnosis Procedure

INFOID:000000005129698

#### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

#### 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between iPod adapter harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	M111	5	OFF	Battery voltage
ACC power supply	M111	3	ACC	Battery voltage

Is the inspection result normal?

YES >> INSPECTION END

NO >> Check harness between iPod adapter and fuse.

## TEL ADAPTER UNIT

### TEL ADAPTER UNIT : Diagnosis Procedure

INFOID:000000005129741

#### 1.CHECK FUSE

Check for blown fuses.



# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19
Ignition switch ON or START	3

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

## 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between TEL adapter unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	B237	1	OFF	Battery voltage
ACC power supply	B237	2	ACC	Battery voltage
Ignition signal	B237	3	ON	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between TEL adapter unit and fuse.

## 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect TEL adapter unit connector.
3. Check continuity between TEL adapter unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B237	4, 14, 19	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

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AV

# RGB (R: RED) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## RGB (R: RED) SIGNAL CIRCUIT

### Description

INFOID:000000005129699

Transmit the image displayed with AV control unit with RGB signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129700

#### 1. CHECK CONTINUITY RGB (R: RED) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	17	M83	40	Existed

4. Check continuity between display unit harness connector and ground.

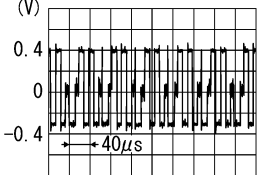
Display unit		Ground	Continuity
Connector	Terminal		
M71	17		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK RGB (R: RED) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	17	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2238J</p>

Is the inspection result normal?

- YES >> Replace display unit.  
 NO >> Replace AV control unit.

# RGB (G: GREEN) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## RGB (G: GREEN) SIGNAL CIRCUIT

### Description

INFOID:000000005129701

Transmit the image displayed with AV control unit with RGB signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129702

#### 1. CHECK CONTINUITY RGB (G: GREEN) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	6	M83	39	Existed

4. Check continuity between display unit harness connector and ground.

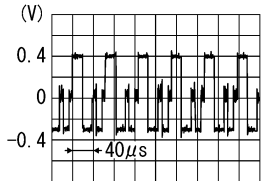
Display unit		Ground	Continuity
Connector	Terminal		
M71	6		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK RGB (G: GREEN) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	6	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2236J</p>

Is the inspection result normal?

- YES >> Replace display unit.  
 NO >> Replace AV control unit.

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# RGB (B: BLUE) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## RGB (B: BLUE) SIGNAL CIRCUIT

### Description

INFOID:000000005129703

Transmit the image displayed with AV control unit with RGB signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129704

#### 1. CHECK CONTINUITY RGB (B: BLUE) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	18	M83	38	Existed

4. Check continuity between display unit harness connector and ground.

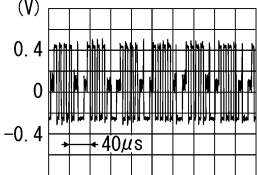
Display unit		Ground	Continuity
Connector	Terminal		
M71	18		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK RGB (B: BLUE) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M71	18	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 SKIB2237J

Is the inspection result normal?

- YES >> Replace display unit.  
NO >> Replace AV control unit.

# RGB SYNCHRONIZING SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## RGB SYNCHRONIZING SIGNAL CIRCUIT

### Description

INFOID:000000005129705

Transmit the RGB synchronizing signal to the display unit so as to synchronize the RGB image displayed with AV control unit.

### Diagnosis Procedure

INFOID:000000005129706

#### 1. CHECK CONTINUITY RGB SYNCHRONIZING SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	19	M83	41	Existed

4. Check continuity between display unit harness connector and ground.

Display unit		Ground	Continuity
Connector	Terminal		
M71	19		Not existed

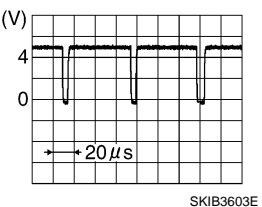
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK RGB SYNCHRONIZING SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Reference value
Display unit			
Connector	Terminal		
M71	19	Ground	

Is the inspection result normal?

YES >> Replace display unit.

NO >> Replace AV control unit.

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# RGB AREA (YS) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## RGB AREA (YS) SIGNAL CIRCUIT

### Description

INFOID:000000005129707

Transmits the display area of RGB image displayed by AV control unit with RGB area (YS) signal to display unit.

### Diagnosis Procedure

INFOID:000000005129708

#### 1. CHECK CONTINUITY RGB AREA (YS) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	9	M83	43	Existed

4. Check continuity between display unit harness connector and ground.

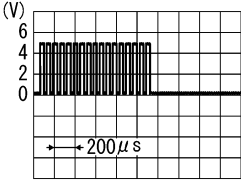
Display unit		Ground	Continuity
Connector	Terminal		
M71	9		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK RGB AREA (YS) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value (Approx.)
Connector	Terminal			
M71	9	Ground	At RGB image is displayed.	5.0 V
			At rear view camera image is displayed.	 <p style="text-align: right; font-size: small;">PKIB4948J</p>

Is the inspection result normal?

- YES >> Replace display unit.  
 NO >> Replace AV control unit.

# HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

### Description

INFOID:000000005129709

In composite image (AUX image, camera image), transmit the vertical synchronizing (VP) signal and horizontal synchronizing (HP) signal from display unit to AV control unit so as to synchronize the RGB images displayed with AV control unit such as the image quality adjusting menu, etc.

### Diagnosis Procedure

INFOID:000000005129710

#### 1. CHECK CONTINUITY HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	8	M83	45	Existed

4. Check continuity between display unit harness connector and ground.

Display unit		Ground	Continuity
Connector	Terminal		
M71	8		Not existed

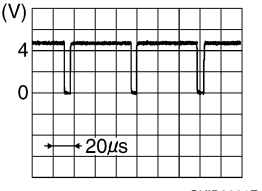
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK HORIZONTAL SYNCHRONIZING (HP) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+) Display unit		(-)	Reference value
Connector	Terminal		
M71	8	Ground	

Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace display unit.

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# VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

### Description

INFOID:000000005129711

In composite image (AUX image, camera image), transmit the vertical synchronizing (VP) signal and horizontal synchronizing (HP) signal from display unit to AV control unit so as to synchronize the RGB images displayed with AV control unit such as the image quality adjusting menu, etc.

### Diagnosis Procedure

INFOID:000000005129712

#### 1. CHECK CONTINUITY VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M71	20	M83	57	Existed

4. Check continuity between display unit harness connector and ground.

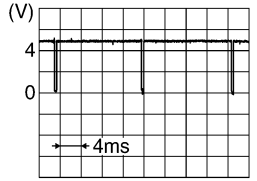
Display unit		Ground	Continuity
Connector	Terminal		
M71	20		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK VERTICAL SYNCHRONIZING (VP) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Reference value
Display unit			
Connector	Terminal		
M71	20	Ground	

Is the inspection result normal?

- YES >> Replace AV control unit.  
NO >> Replace display unit.



# AUX IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## AUX IMAGE SIGNAL CIRCUIT

### Description

INFOID:000000005129795

- Transmits the image signal of AUX device from auxiliary input jacks to AV control unit.
- AV control unit transmits the image signal that is inputted to the display unit.

### Diagnosis Procedure

INFOID:000000005129796

#### 1. CHECK CONTINUITY AUX IMAGE SIGNAL CIRCUIT (AUX INPUT JACKS AND AV CONTROL UNIT)

1. Turn ignition switch OFF.
2. Disconnect auxiliary input jacks connector and AV control unit connector.
3. Check continuity between auxiliary input jacks harness connector and AV control unit harness connector.

Auxiliary input jacks		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M154*1	7	M84	66	Existed
M362*2				

- \*1: A/T models
- \*2: M/T models

4. Check continuity between auxiliary input jacks harness connector and ground.

Auxiliary input jacks		Ground	Continuity
Connector	Terminal		
M154*1	7	Ground	Not existed
M362*2			

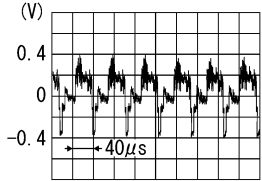
- \*1: A/T models
- \*2: M/T models

#### Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK AUX IMAGE SIGNAL (AUX INPUT JACKS TO AV CONTROL UNIT)

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between auxiliary input jacks harness connector and ground.

(+)		(-)	Condition	Reference value
Connector	Terminal			
M154*1	7	Ground	At AUX image displayed.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2251J</p>
M362*2				

- \*1: A/T models
- \*2: M/T models

#### Is the inspection result normal?

- YES >> INSPECTION END  
NO >> Check that there is no malfunction in the external device.

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AV

# COMPOSITE IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## COMPOSITE IMAGE SIGNAL CIRCUIT

### Description

INFOID:000000005129814

AV control unit that inputs the camera image signal and AUX image signal transmits the composite image signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129816

#### 1. CHECK CONTINUITY COMPOSITE IMAGE SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect AV control unit connector and display unit connector.
3. Check continuity between AV control unit harness connector and display unit harness connector.

AV control unit		Display unit		Continuity
Connector	Terminals	Connector	Terminals	
M83	36	M71	15	Existed
	37		4	

4. Check continuity between display unit harness connector and ground.

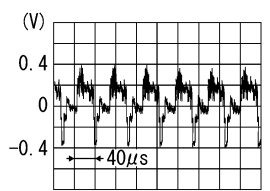
Display unit		Ground	Continuity
Connector	Terminal		
M71	15		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK COMPOSITE IMAGE SIGNAL

1. Connect AV control unit connector and display unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector using an oscilloscope.

(+)		(-)	Condition	Signal
Display unit				
Connector	Terminal			
M71	15	Ground	When camera image is displayed.	 <p>SKIB2251J</p>

Is the inspection result normal?

- YES >> Replace display unit.  
 NO >> Replace AV control unit.

# CONTROL SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## CONTROL SIGNAL CIRCUIT

### Description

INFOID:000000005129799

TEL adapter unit identifies the vehicle model according to the control signal and performs the control.

### Diagnosis Procedure

INFOID:000000005129800

#### 1. CHECK CONTINUITY CONTROL SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect TEL adapter unit connector.
3. Check continuity between TEL adapter unit harness connector and ground.

TEL adapter unit		Continuity
Connector	Terminals	
B237	20	Existed
	22	
	23	
	24	

Is the inspection result normal?

- YES >> Replace TEL adapter unit.  
NO >> Repair harness or connector.

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AV

# DISK EJECT SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## DISK EJECT SIGNAL CIRCUIT

### Description

INFOID:000000005129715

The eject signal is output to AV control unit when the eject switch of multifunction switch is pressed.

### Diagnosis Procedure

INFOID:000000005129716

#### 1. CHECK CONTINUITY CD EJECT SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect multifunction switch connector and AV control unit connector.
3. Check continuity between multifunction switch harness connector and AV control unit harness connector.

Multifunction switch		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M72	14	M85	103	Existed

4. Check continuity between multifunction switch harness connector and ground.

Multifunction switch		Ground	Continuity
Connector	Terminal		
M72	14		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK AV CONTROL UNIT VOLTAGE

1. Connect multifunction switch connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit harness connector and ground.

(+)		(-)	Condition	Voltage (Approx.)
AV control unit				
Connector	Terminal			
M85	103	Ground	Pressing the eject switch	0 V
			Except for above	3.3 V

Is the inspection result normal?

- YES >> Replace preset switch.  
NO >> Replace AV control unit.

# MICROPHONE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## MICROPHONE SIGNAL CIRCUIT

### Description

INFOID:000000005129810

Supply power from TEL adapter unit to microphone. The microphone transmits the sound/voice to the microphone.

### Diagnosis Procedure

INFOID:000000005129811

#### 1.CHECK CONTINUITY BETWEEN TEL ADAPTER UNIT AND MICROPHONE CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect TEL adapter unit connector and microphone connector.
3. Check continuity between TEL adapter unit harness connector and microphone harness connector.

TEL adapter unit		Microphone		Continuity
Connector	Terminals	Connector	Terminals	
B237	7	R7	1	Existed
	8		2	
	29		4	

4. Check continuity between TEL adapter unit harness connector and ground.

TEL adapter unit		Ground	Continuity
Connector	Terminals		
M237	7		Not existed
	29		

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2.CHECK VOLTAGE MICROPHONE VCC

1. Connect TEL adapter unit connector.
2. Turn ignition switch ON.
3. Check voltage between TEL adapter unit harness connector.

(+)		(-)		Voltage (Approx.)
TEL adapter unit		TEL adapter unit		
Connector	Terminal	Connector	Terminal	
B237	29	B237	8	5.0 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace TEL adapter unit.

#### 3.CHECK MICROPHONE SIGNAL

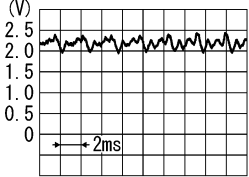
1. Connect microphone connector.
2. Check signal between TEL adapter unit harness connector.

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# MICROPHONE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

(+)		(-)		Condition	Reference value
TEL adapter unit		TEL adapter unit			
Connector	Terminal	Connector	Terminal		
B237	7	B237	8	give a voice.	 <p style="text-align: right;">PKIB5037J</p>

Is the inspection result normal?

- YES >> Replace TEL adapter unit.
- NO >> Replace microphone.

# CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)

### Description

INFOID:000000005129719

- Camera control unit outputs camera power supply to rear view camera and inputs rear view camera image signal from rear view camera when the reverse signal is input.
- The camera control unit that inputs the camera image signal transmits the camera image signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129720

#### 1. CHECK CONTINUITY CAMERA POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and rear view camera connector.
3. Check continuity between camera control unit harness connector and rear view camera harness connector.

Camera control unit		Rear view camera		Continuity
Connector	Terminal	Connector	Terminal	
B241	8	B311	1	Existed

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminal		
B241	8		Not existed

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK VOLTAGE CAMERA POWER SUPPLY

1. Connect camera control unit connector and rear view camera connector.
2. Turn ignition switch ON.
3. Shift position is "R".
4. Check voltage between camera control unit harness connector and ground.

(+)		(-)	Condition	Voltage (Approx.)
Camera control unit Connector	Terminal			
B241	8	Ground	Shift position is "R".	6.0 V

Is inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

#### 3. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and rear view camera connector.
3. Check continuity between camera control unit harness connector and rear view camera harness connector.

Camera control unit		Rear view camera		Continuity
Connector	Terminal	Connector	Terminal	
B241	6	B311	3	Existed

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# CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminal		
B241	6		Not existed

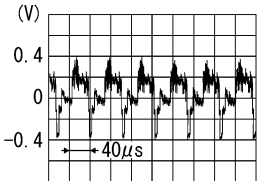
Is inspection result normal?

YES >> GO TO 4.

NO >> Repair harness or connector.

## 4. CHECK CAMERA IMAGE SIGNAL

1. Connect camera control unit connector and rear view camera connector.
2. Turn ignition switch ON.
3. Shift position is "R".
4. Check signal between camera control unit harness connector and ground.

(+)		(-)	Condition	Reference value
Camera control unit				
Connector	Terminal			
B241	6	Ground	At rear view camera image is displayed.	 <p style="text-align: right; font-size: small;">SKIB2251J</p>

Is inspection result normal?

YES >> Replace camera control unit.

NO >> Replace rear view camera.



# CAMERA IMAGE SIGNAL CIRCUIT (CAMERA CONTROL UNIT TO AV CONTROL UNIT)

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## CAMERA IMAGE SIGNAL CIRCUIT (CAMERA CONTROL UNIT TO AV CONTROL UNIT)

### Description

INFOID:000000005129812

- Camera control unit outputs camera power supply to rear view camera and inputs rear view camera image signal from rear view camera when the reverse signal is input.
- The camera control unit that inputs the camera image signal transmits the camera image signal to the AV control unit.

### Diagnosis Procedure

INFOID:000000005129813

#### 1. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and AV control unit connector.
3. Check continuity between camera control unit harness connector and AV control unit harness connector.

Camera control unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
B241	12	M84	65	Existed
	11		64	

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminal		
B241	12		Not existed

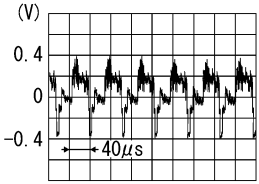
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK CAMERA IMAGE SIGNAL

1. Connect camera control unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between camera control unit harness connector and ground using an oscilloscope.

(+)		(-)	Condition	Signal
Camera control unit				
Connector	Terminal			
B241	12	Ground	Shift the selector lever to "R" position.	 <p style="text-align: right; font-size: small;">SKIB2251J</p>

Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace camera control unit.

# COMMUNICATION SIGNAL CIRCUIT (CONT-SAT)

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## COMMUNICATION SIGNAL CIRCUIT (CONT-SAT)

### Description

INFOID:000000005129742

Satellite radio tuner and AV control unit are connected with a serial communication. They transmit the operation signal from AV control unit to satellite radio tuner, and transmit the display signal from satellite radio tuner to AV control unit.

### Diagnosis Procedure

INFOID:000000005129743

#### 1. CHECK CONTINUITY COMMUNICATION SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect satellite radio tuner connector and AV control unit connector.
3. Check continuity between satellite radio tuner harness connector and AV control unit harness connector.

Satellite radio tuner		AV control unit		Continuity
Connector	Terminals	Connector	Terminals	
B236	9	M82	29	Existed
	10		30	

4. Check continuity between satellite radio tuner harness connector and ground.

Satellite radio tuner		Ground	Continuity
Connector	Terminals		
B236	9		Not existed
	10		

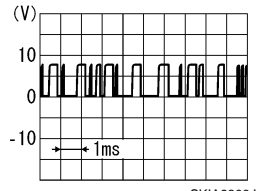
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK COMMUNICATION SIGNAL

1. Connect satellite radio tuner connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between satellite radio tuner harness connector and ground.

(+) Satellite radio tuner		(-)	Condition	Reference value
Connector	Terminal			
B236	9	Ground	When satellite radio mode is selected.	 SKIA9300J

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace satellite radio tuner.

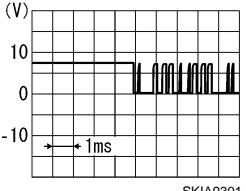
#### 3. CHECK COMMUNICATION SIGNAL

Check signal between satellite radio tuner harness connector and ground.

# COMMUNICATION SIGNAL CIRCUIT (CONT-SAT)

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

(+)		(-)	Condition	Reference value
Satellite radio tuner				
Connector	Terminal			
B236	10	Ground	When satellite radio mode is selected.	

Is the inspection result normal?

- YES >> Replace satellite radio tuner.
- NO >> Replace AV control unit.

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# REQUEST SIGNAL CIRCUIT (SAT→CONT)

[BOSE AUDIO WITHOUT NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

## REQUEST SIGNAL CIRCUIT (SAT→CONT)

### Description

INFOID:000000005129744

Request signal transmits the signal to recognize the connection of satellite radio tuner from satellite radio tuner to AV control unit.

### Diagnosis Procedure

INFOID:000000005129745

#### 1. CHECK CONTINUITY REQUEST SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect satellite radio tuner connector and AV control unit connector.
3. Check continuity between satellite radio tuner harness connector and AV control unit harness connector.

Satellite radio tuner		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
B236	8	M82	28	Existed

4. Check continuity between satellite radio tuner harness connector and ground.

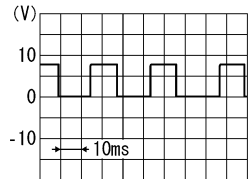
Satellite radio tuner		Ground	Continuity
Connector	Terminal		
B236	8		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK COMMUNICATION SIGNAL

1. Connect satellite radio tuner connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between satellite radio tuner harness connector and ground.

(+) Satellite radio tuner		(-)	Condition	Reference value
Connector	Terminal			
B236	8	Ground	When satellite radio mode is selected.	 <p>(V)</p> <p>10</p> <p>0</p> <p>-10</p> <p>10ms</p> <p>SKIA9299J</p>

Is the inspection result normal?

- YES >> Replace AV control unit.  
NO >> Replace satellite radio tuner.

# STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT

### Description

INFOID:000000005129725

- Steering angle sensor signal 1, 2 detects the turning direction and quantity of the steering and transmits it to the camera control unit.
- Steering angle sensor signal 3 detects the neutral position of the steering and transmits it to the camera control unit.
- Camera control unit performs the correction of neutral position with sensor signal 1, 2, 3 and vehicle speed signal.

### Diagnosis Procedure

INFOID:000000005129726

#### 1. CHECK CONTINUITY STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and steering angle sensor connector.
3. Check continuity between camera control unit harness connector and steering angle sensor harness connector.

Camera control unit		Steering angle sensor		Continuity
Connector	Terminals	Connector	Terminals	
B241	23	M37	3	Existed
	24		4	

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminals		
B241	23		Not existed
	24		

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK SENSOR SIGNAL 1, 2

1. Connect camera control unit connector.
2. Turn ignition switch ON.
3. Check voltage between camera control unit harness connector and ground.

(+) Camera control unit		(-)	Voltage (Approx.)
Connector	Terminals		
B241	23	Ground	5.0 V
	24		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

#### 3. CHECK SENSOR SIGNAL 1, 2

1. Connect steering angle sensor connector.
2. Check signal between camera control unit harness connector and ground.

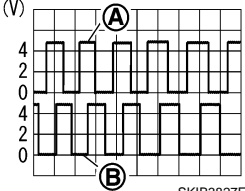
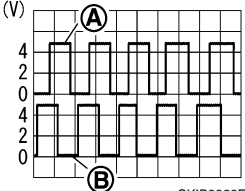
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AV

# STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

(+)		(-)	Condition	Reference value
Camera control unit				
Connector	Terminals			
B241	23, 24	Ground	Turn the steering to the right	 <p style="text-align: right; font-size: small;">SKIB3827E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
			Turn the steering to the left	 <p style="text-align: right; font-size: small;">SKIB3828E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>

Is the inspection result normal?

- YES >> INSPECTION END
- NO >> Replace steering angle sensor.

# STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT

### Description

INFOID:000000005129727

- Steering angle sensor signal 1, 2 detects the turning direction and quantity of the steering and transmits it to the camera control unit.
- Steering angle sensor signal 3 detects the neutral position of the steering and transmits it to the camera control unit.
- Camera control unit performs the correction of neutral position with sensor signal 1, 2, 3 and vehicle speed signal.

### Diagnosis Procedure

INFOID:000000005129728

#### 1. CHECK CONTINUITY STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and steering angle sensor connector.
3. Check continuity between camera control unit harness connector and steering angle sensor harness connector.

Camera control unit		Steering angle sensor		Continuity
Connector	Terminals	Connector	Terminals	
B241	25	M37	5	Existed

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminals		
B241	25		Not existed

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK SENSOR SIGNAL 3

1. Connect camera control unit connector.
2. Turn ignition switch ON.
3. Check voltage between camera control unit harness connector and ground.

(+)		(-)	Voltage (Approx.)
Connector	Terminals		
B241	25	Ground	5.0 V

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

#### 3. CHECK SENSOR SIGNAL 3

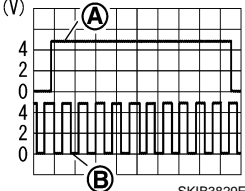
1. Connect steering angle sensor connector.
2. Check signal between camera control unit harness connector and ground.

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# STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

(+)		(-)	Condition	Reference value
Camera control unit				
Connector	Terminals			
B241	25	Ground	Turn the steering around the neutral position	 <p>(V)</p> <p>A: Sensor signal 3 B: Sensor signal 1</p> <p>SKIB3829E</p>

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering angle sensor.



# STEERING SWITCH SIGNAL A CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## STEERING SWITCH SIGNAL A CIRCUIT

### Description

INFOID:000000005129818

Transmits the steering switch signal to AV control unit.

### Diagnosis Procedure

INFOID:000000005129819

#### 1. CHECK STEERING SWITCH SIGNAL A CIRCUIT

1. Disconnect AV control unit connector and spiral cable connector.
2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M81	6	M36	24	Existed

3. Check continuity between AV control unit harness connector and ground.

AV control unit		Ground	Continuity
Connector	Terminal		
M81	6		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK SPIRAL CABLE

Check spiral cable.

Is the inspection result normal?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3. CHECK AV CONTROL UNIT VOLTAGE

1. Connect AV control unit connector and spiral cable connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit harness connector.

(+)		(-)		Voltage (Approx.)
AV control unit		AV control unit		
Connector	Terminal	Connector	Terminal	
M81	6	M81	15	3.3 V

Is the inspection result normal?

- YES >> GO TO 4.  
NO >> Replace AV control unit.

#### 4. CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-265, "Component Inspection"](#).

Is the inspection result normal?

- YES >> INSPECTION END  
NO >> Replace steering switch.

### Component Inspection

INFOID:000000005129820

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.

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# STEERING SWITCH SIGNAL A CIRCUIT

[BOSE AUDIO WITHOUT NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

Standard

Between terminals 14 and 17

 switch ON : Approx. 716 – 730 Ω

MENU DOWN switch ON : Approx. 318 – 324 Ω

MENU UP switch ON : Approx. 120 – 122 Ω

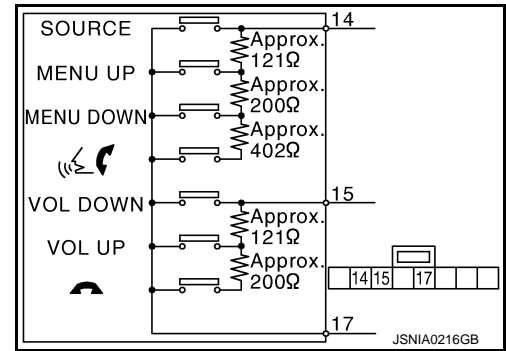
SOURCE switch ON : Approx. 0 Ω

Between terminals 15 and 17

 switch ON : Approx. 318 – 324 Ω

VOL UP switch ON : Approx. 120 – 122 Ω

VOL DOWN switch ON : Approx. 0 Ω



# STEERING SWITCH SIGNAL B CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## STEERING SWITCH SIGNAL B CIRCUIT

### Description

INFOID:000000005129828

Transmits the steering switch signal to AV control unit.

### Diagnosis Procedure

INFOID:000000005129822

#### 1. CHECK STEERING SWITCH SIGNAL B CIRCUIT

1. Disconnect AV control unit connector and spiral cable connector.
2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M81	16	M36	31	Existed

3. Check continuity between AV control unit harness connector and ground.

AV control unit		Ground	Continuity
Connector	Terminal		
M81	16		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK SPIRAL CABLE

Check spiral cable.

Is the inspection result normal?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3. CHECK AV CONTROL UNIT VOLTAGE

1. Connect AV control unit connector and spiral cable connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit harness connector.

(+)		(-)		Voltage (Approx.)
AV control unit		AV control unit		
Connector	Terminal	Connector	Terminal	
M81	16	M81	15	3.3 V

Is the inspection result normal?

- YES >> GO TO 4.  
NO >> Replace AV control unit.

#### 4. CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-267, "Component Inspection"](#).

Is the inspection result normal?

- YES >> INSPECTION END  
NO >> Replace steering switch.

### Component Inspection

INFOID:000000005129829

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.

# STEERING SWITCH SIGNAL B CIRCUIT

[BOSE AUDIO WITHOUT NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

Standard

Between terminals 14 and 17

 switch ON : Approx. 716 – 730 Ω

MENU DOWN switch ON : Approx. 318 – 324 Ω

MENU UP switch ON : Approx. 120 – 122 Ω

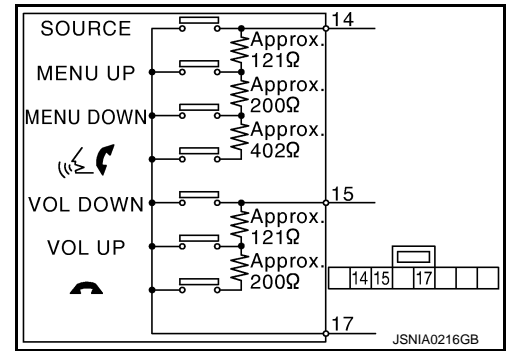
SOURCE switch ON : Approx. 0 Ω

Between terminals 15 and 17

 switch ON : Approx. 318 – 324 Ω

VOL UP switch ON : Approx. 120 – 122 Ω

VOL DOWN switch ON : Approx. 0 Ω



# STEERING SWITCH SIGNAL GND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## STEERING SWITCH SIGNAL GND CIRCUIT

### Description

INFOID:000000005129830

Transmits the steering switch signal to AV control unit.

### Diagnosis Procedure

INFOID:000000005129825

#### 1.CHECK STEERING SWITCH SIGNAL GND CIRCUIT

1. Disconnect AV control unit connector and spiral cable connector.
2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M81	15	M36	33	Existed

3. Connect AV control unit connector.

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2.CHECK SPIRAL CABLE

Check spiral cable.

Is the inspection result normal?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3.CHECK GROUND CIRCUIT

1. Connect AV control unit connector.
2. Check continuity between AV control unit harness connector and ground.

AV control unit		Ground	Continuity
Connector	Terminal		
M81	15		Not existed

Is the inspection result normal?

- YES >> GO TO 4.  
NO >> Replace AV control unit.

#### 4.CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-269, "Component Inspection"](#).

Is the inspection result normal?

- YES >> INSPECTION END  
NO >> Replace steering switch.

### Component Inspection

INFOID:000000005129831

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.

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AV

# STEERING SWITCH SIGNAL GND CIRCUIT

[BOSE AUDIO WITHOUT NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

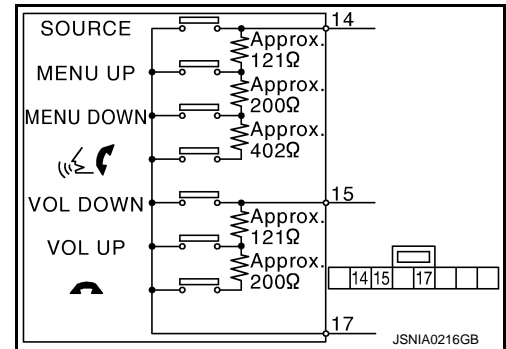
Standard

Between terminals 14 and 17

-  switch ON : Approx. 716 – 730 Ω
- MENU DOWN switch ON : Approx. 318 – 324 Ω
- MENU UP switch ON : Approx. 120 – 122 Ω
- SOURCE switch ON : Approx. 0 Ω

Between terminals 15 and 17

-  switch ON : Approx. 318 – 324 Ω
- VOL UP switch ON : Approx. 120 – 122 Ω
- VOL DOWN switch ON : Approx. 0 Ω



# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## ECU DIAGNOSIS INFORMATION

### AV CONTROL UNIT

#### Reference Value

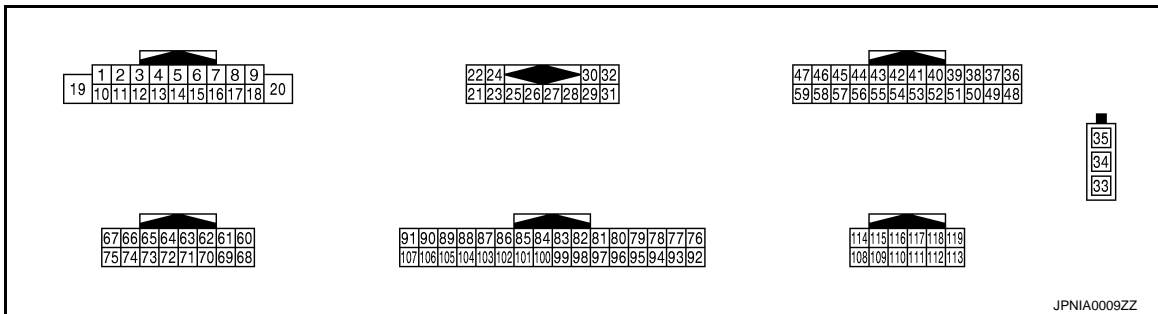
INFOID:000000005128545

#### VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition		Value/Status
VHCL SPD SIG	Ignition switch ON	Vehicle speed > 0 km/h (0 MPH)	On
		Vehicle speed = 0 km/h (0 MPH)	Off
PKB SIG	Ignition switch ON	Parking brake is applied.	On
		Parking brake is released.	Off
ILLUM SIG	Ignition switch ON	Light switch ON	On
		Light switch OFF	Off
IGN SIG	Ignition switch ON	—	On
	Ignition switch ACC	—	Off
REV SIG	Ignition switch ON	Selector lever in R position	On
		Selector lever in any position other than R	Off

#### TERMINAL LAYOUT



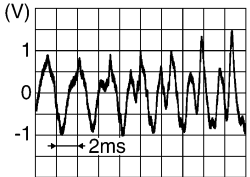
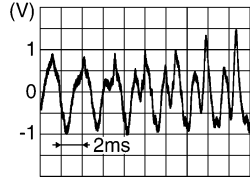
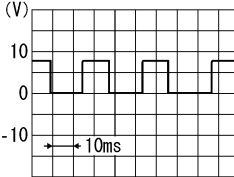
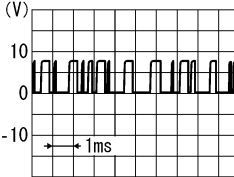
#### PHYSICAL VALUES

Terminal (Wire color)		Description		Condition	Reference value (Approx.)	
+	-	Signal name	Input/Output			
6 (P)	15 (B)	Steering switch signal A	Input	Ignition switch ON	Keep pressing SOURCE switch.	0 V
				Keep pressing Δ switch.	0.7 V	
				Keep pressing ▽ switch.	1.3 V	
				Keep pressing ⚡ switch	2.0 V	
				Except for above.	3.3 V	
7 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
8 (B)	Ground	Ground	—	Ignition switch ON	—	0 V

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

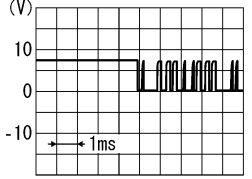
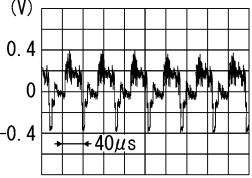
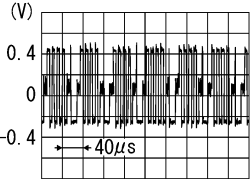
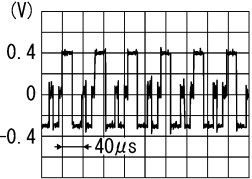
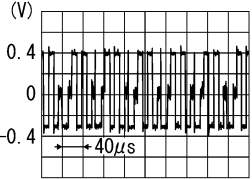
Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
9 (L)	Ground	Illumination signal	Input	Ignition switch OFF	Lighting switch is OFF.	0 V
					Lighting switch is ON.	12.0 V
16 (L)	15 (B)	Steering switch signal B	Input	Ignition switch ON	Keep pressing VOL DOWN switch.	0 V
					Keep pressing VOL UP switch.	0.7 V
					Keep pressing  switch.	1.3 V
					Except for above.	3.3 V
17 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
19 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
20 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
22 (B)	21 (W)	Satellite radio sound signal LH	Input	Ignition switch ON	When satellite radio mode is selected.	 <small>SKIB3609E</small>
24 (G)	23 (R)	Satellite radio sound signal RH	Input	Ignition switch ON	When satellite radio mode is selected.	 <small>SKIB3609E</small>
25	—	Shield	—	—	—	—
26	—	Shield	—	—	—	—
28 (P)	Ground	Request signal (SAT→CONT)	Input	Ignition switch ON	When satellite radio mode is selected.	 <small>SKIA9299J</small>
29 (G)	Ground	Communication signal (SAT→CONT)	Input	Ignition switch ON	When satellite radio mode is selected.	 <small>SKIA9300J</small>



# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

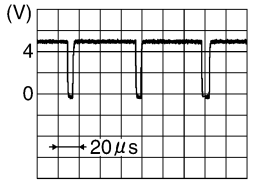
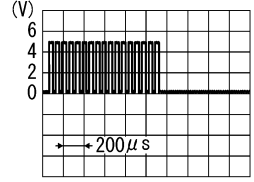
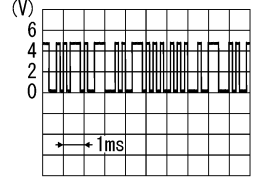
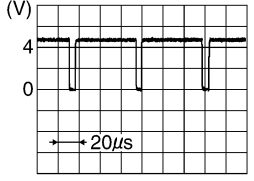
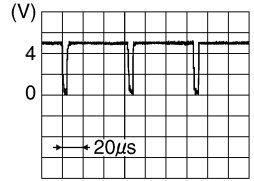
Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
30 (L)	Ground	Communication signal (CONT→SAT)	Output	Ignition switch ON	When satellite radio mode is selected.	
34	—	AM-FM main	Input	—	—	—
35	Ground	Antenna amp. ON signal	Output	Ignition switch ACC	—	12.0 V
36 (SB)	Ground	Composite image signal	Output	Ignition switch ON	At camera image is dis- played.	
37 (V)	Ground	Composite image ground	—	Ignition switch ON	—	0 V
38 (P)	Ground	RGB signal (B: blue)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting “Color Spectrum Bar” on DISPLAY DIAGNOSIS screen.	
39 (L)	Ground	RGB signal (G: green)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting “Color Spectrum Bar” on DISPLAY DIAGNOSIS screen.	
40 (G)	Ground	RGB signal (R: red)	Output	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting “Color Spectrum Bar” on DISPLAY DIAGNOSIS screen.	

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# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

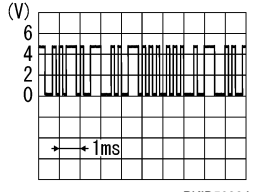
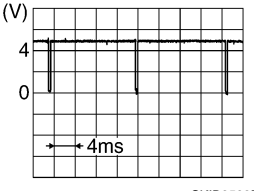
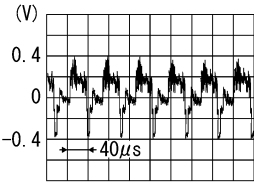
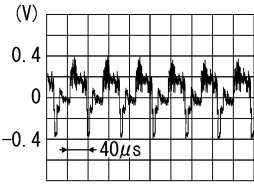
[BOSE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
41 (W)	Ground	RGB synchronizing signal	Output	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIB3603E</p>
42	—	Shield	—	—	—	—
43 (B)	Ground	RGB area (YS) signal	Output	Ignition switch ON	At RGB image is displayed.	5.0 V
					At AUX image is displayed.	 <p style="text-align: right; font-size: small;">PKIB4948J</p>
44 (L)	Ground	Communication signal (DISP→CONT)	Input	Ignition switch ON	When adjusting display brightness.	 <p style="text-align: right; font-size: small;">PKIB5039J</p>
45 (R)	Ground	Horizontal synchronizing (HP) signal	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIB3601E</p>
46 (LG)	Ground	Signal ground	—	Ignition switch ON	—	0 V
47 (O)	Ground	Signal VCC	Output	Ignition switch ACC	—	9.0 V
48 (BR)	Ground	Composite synchronizing signal	Output	Ignition switch ON	When camera image is dis- played.	 <p style="text-align: right; font-size: small;">SKIB0825E</p>
49 (Y)	—	Shield	—	—	—	—
50	—	Shield	—	—	—	—
55	—	Shield	—	—	—	—

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
56 (P)	Ground	Communication signal (CONT→DISP)	Output	Ignition switch ON	When adjusting display brightness.	 <p style="text-align: right; font-size: small;">PKIB5039J</p>
57 (G)	Ground	Vertical synchronizing (VP) signal	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIB3598E</p>
58 (BR)	Ground	Inverter ground	—	Ignition switch ON	—	0 V
59 (Y)	Ground	Inverter VCC	Output	Ignition switch ACC	—	9.0 V
64	—	Shield	—	—	—	—
65 (W)	Ground	Camera image signal	Input	Ignition switch ON	At camera image is dis- played.	 <p style="text-align: right; font-size: small;">SKIB2251J</p>
66 (G)	Ground	AUX image signal	Input	Ignition switch ON	At AUX image is displayed.	 <p style="text-align: right; font-size: small;">SKIB2251J</p>
68 (GR)	Ground	Camera connection recog- nition signal	Input	Ignition switch ON	Connected to camera control unit connector.	0 V
					Not connected to camera control unit connector.	5.0 V
73 (B)	—	Shield	—	—	—	—
74 (R)	Ground	AUX image signal ground	—	Ignition switch ON	—	0 V

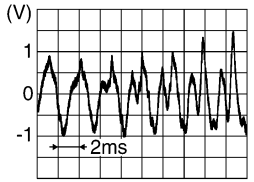
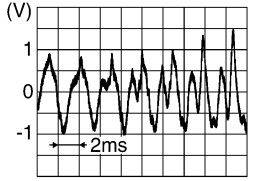
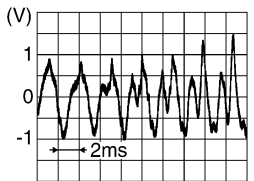
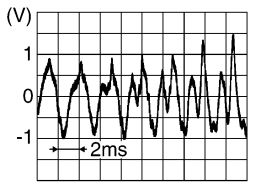
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AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

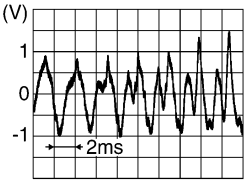
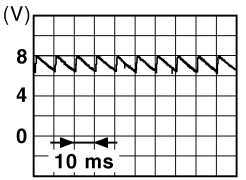
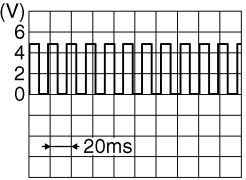
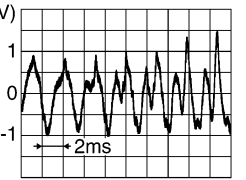
[BOSE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
80 (L)	79 (P)	TEL voice signal	Input	Ignition switch ON	During voice guide output with the  switch pressed.	 <small>SKIB3609E</small>
81	—	Shield	—	—	—	—
83 (B)	82 (G)	iPod sound signal RH	Input	Ignition switch ON	When iPod mode is select- ed.	 <small>SKIB3609E</small>
85 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
86 (L)	—	CAN-H	Input/ Output	—	—	—
87 (P)	—	CAN-L	Input/ Output	—	—	—
88 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
89 (R)	—	AV communication signal (L)	Input/ Output	—	—	—
90 (SB)	—	AV communication signal (H)	Input/ Output	—	—	—
91 (Y)	—	AV communication signal (L)	Input/ Output	—	—	—
95 (R)	Ground	AUX sound signal RH	Input	Ignition switch ON	When AUX mode is select- ed.	 <small>SKIB3609E</small>
96 (W)	Ground	AUX sound signal LH	Input	Ignition switch ON	When AUX mode is select- ed.	 <small>SKIB3609E</small>
97 (B)	Ground	AUX sound signal ground	—	Ignition switch ON	—	0 V

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

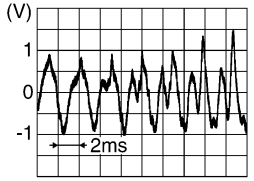
Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
99 (R)	98 (W)	iPod sound signal LH	Input	Ignition switch ON	When iPod mode is select- ed.	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
100	—	Shield	—	—	—	—
101 (BR)	Ground	Switch ground	—	Ignition switch ON	—	0 V
103 (SB)	Ground	Disk eject signal	Input	—	Pressing the eject switch.	0 V
					Except for above	3.3 V
104 (G)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
105 (O)	Ground	Reverse signal	Input	Ignition switch ON	R position	12.0 V
					Other than R position	0 V
106 (SB)	Ground	Parking brake signal	Input	Ignition switch ON	Parking brake ON	0 V
					Parking brake OFF	 <p style="text-align: right; font-size: small;">JSNIA0007GB</p>
107 (GR)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is ap- prox. 40 km/h (25 MPH)	<p><b>NOTE:</b> Maximum voltage may be 12.0 V due to specifications (connected units).</p>  <p style="text-align: right; font-size: small;">SKIA6649J</p>
109 (R)	115 (G)	Sound signal front RH	Output	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>

A  
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G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
111	—	Shield	—	—	—	—
113 (P)	119 (L)	Sound signal front LH	Output	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>

## Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM -

INFOID:000000004371653

**NOTE:**

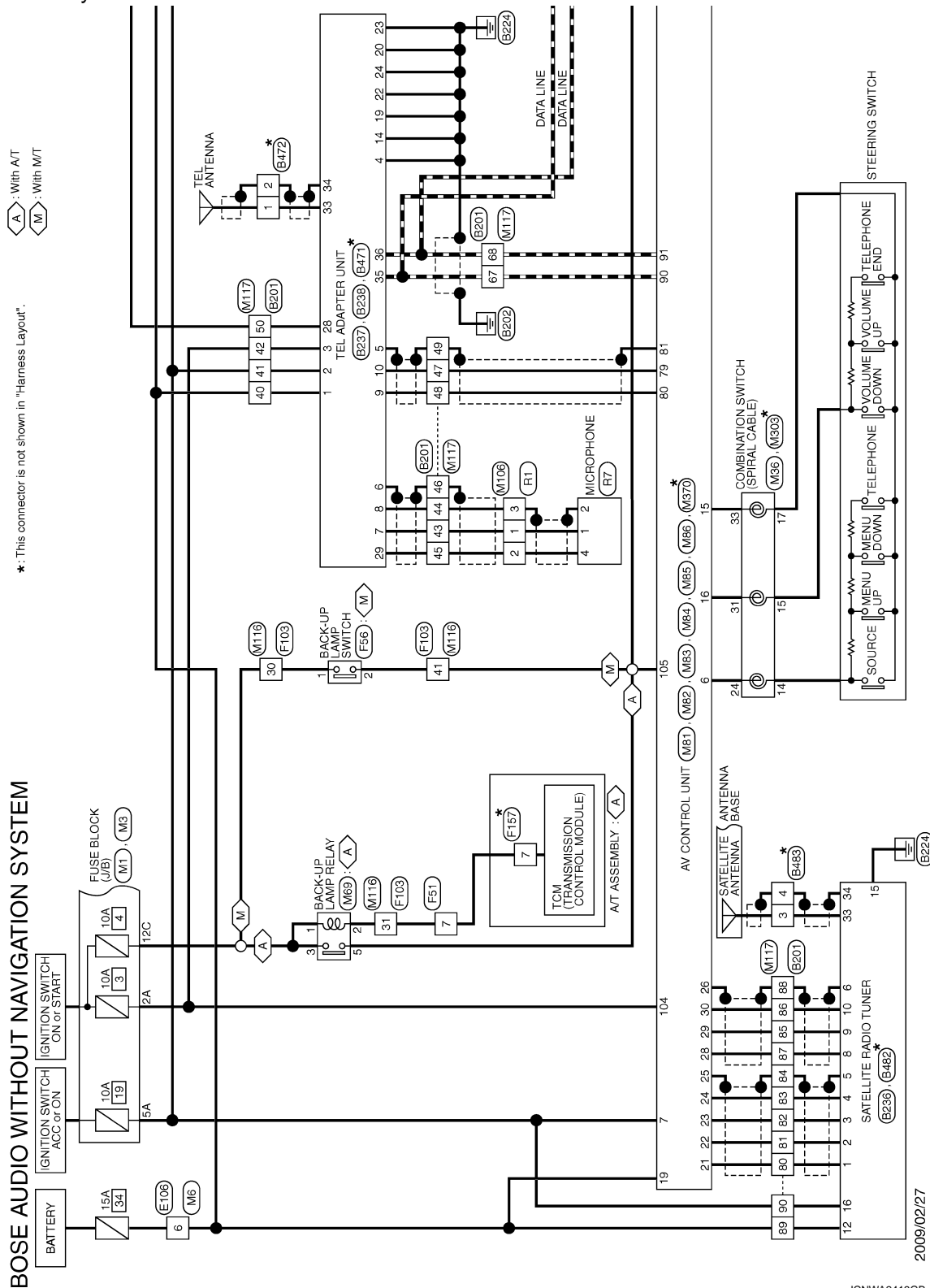
# AV CONTROL UNIT

[BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM



\*: This connector is not shown in "Harness Layout".

A : With A/T  
M : With M/T

2009/02/27  
JCNWA2413GB

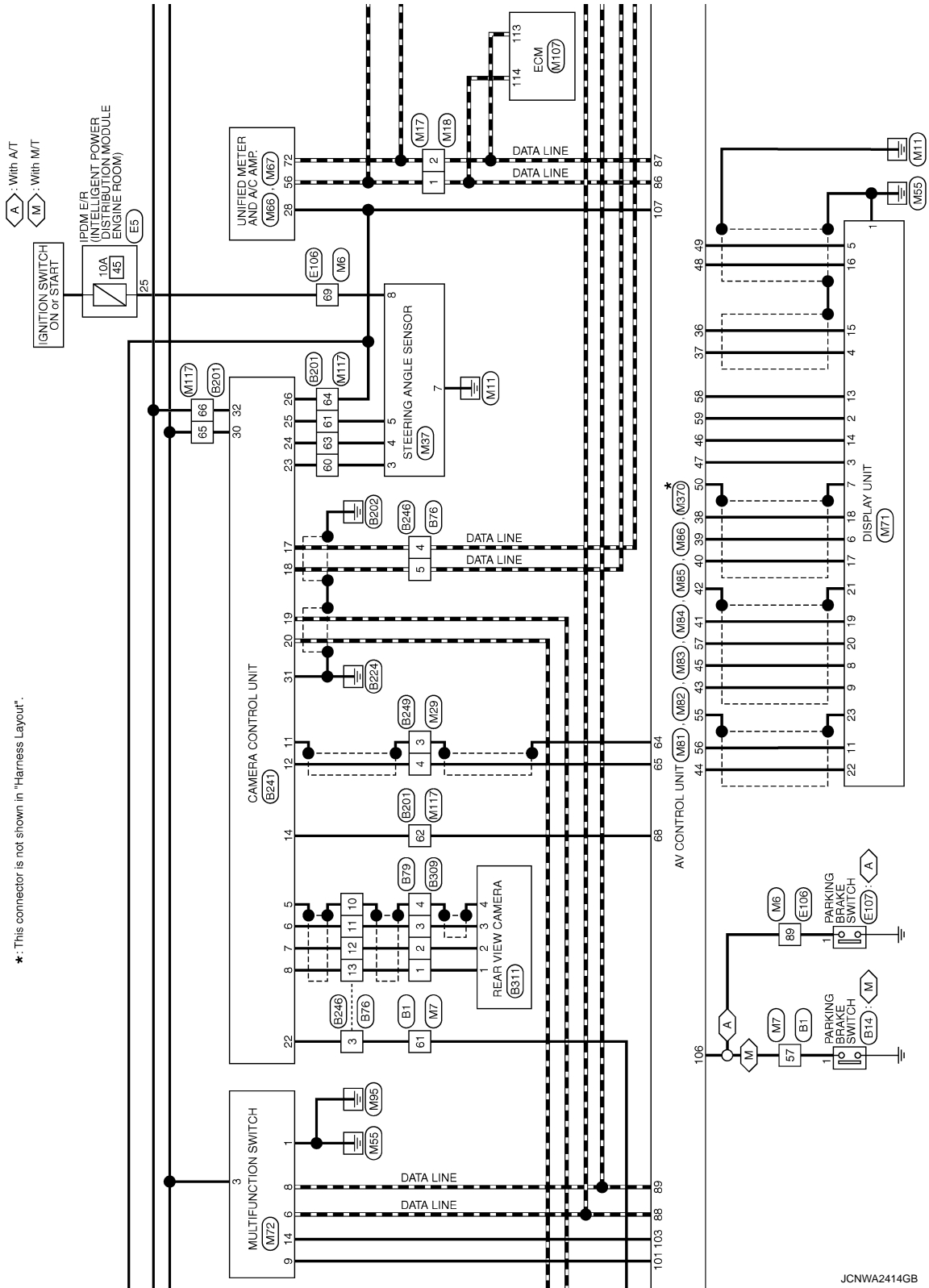
A  
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L  
M  
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P

AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]



\*: This connector is not shown in "Harness Layout".

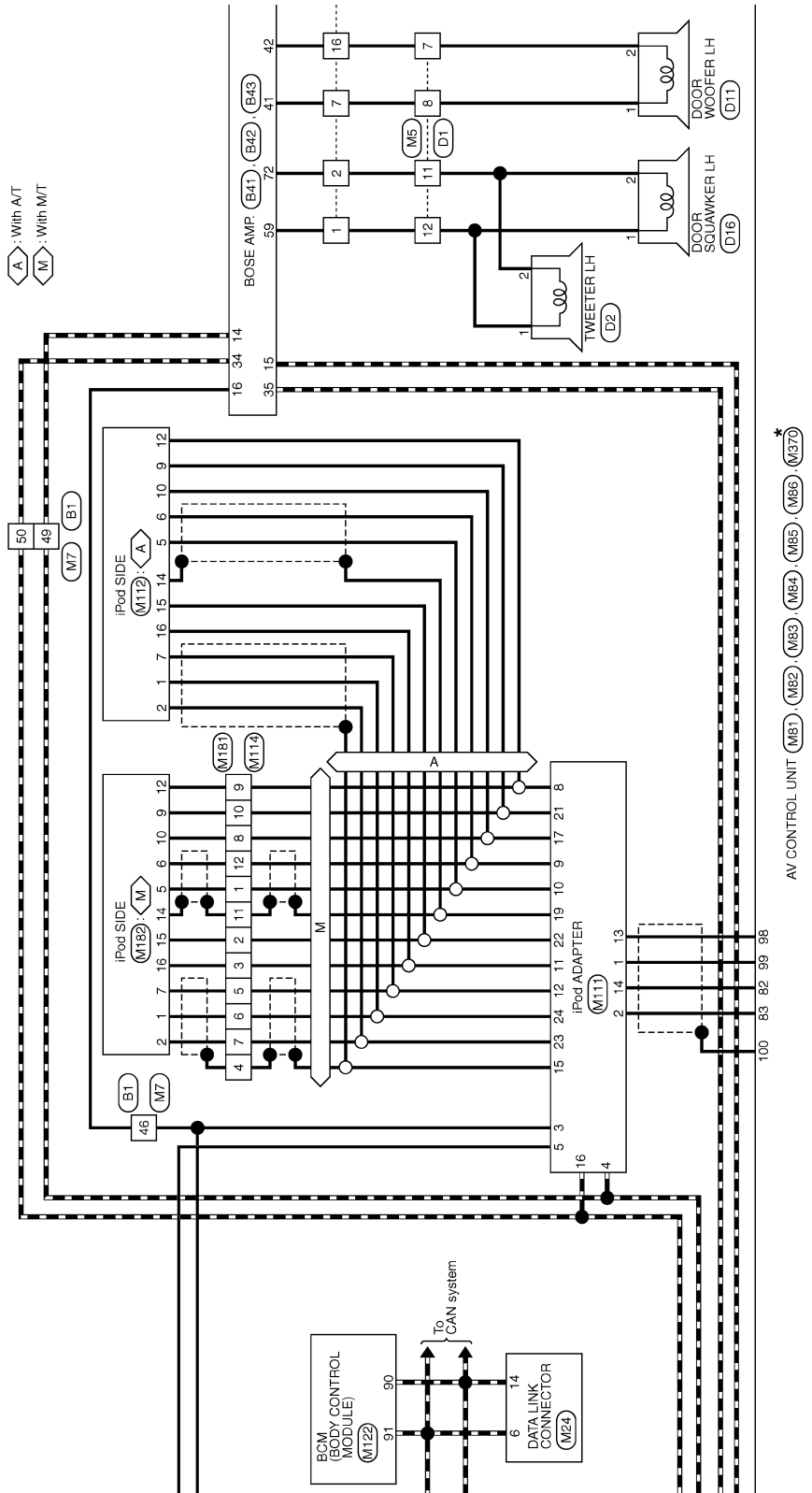
JCNWA2414GB



# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]



\*: This connector is not shown in "Harness Layout".

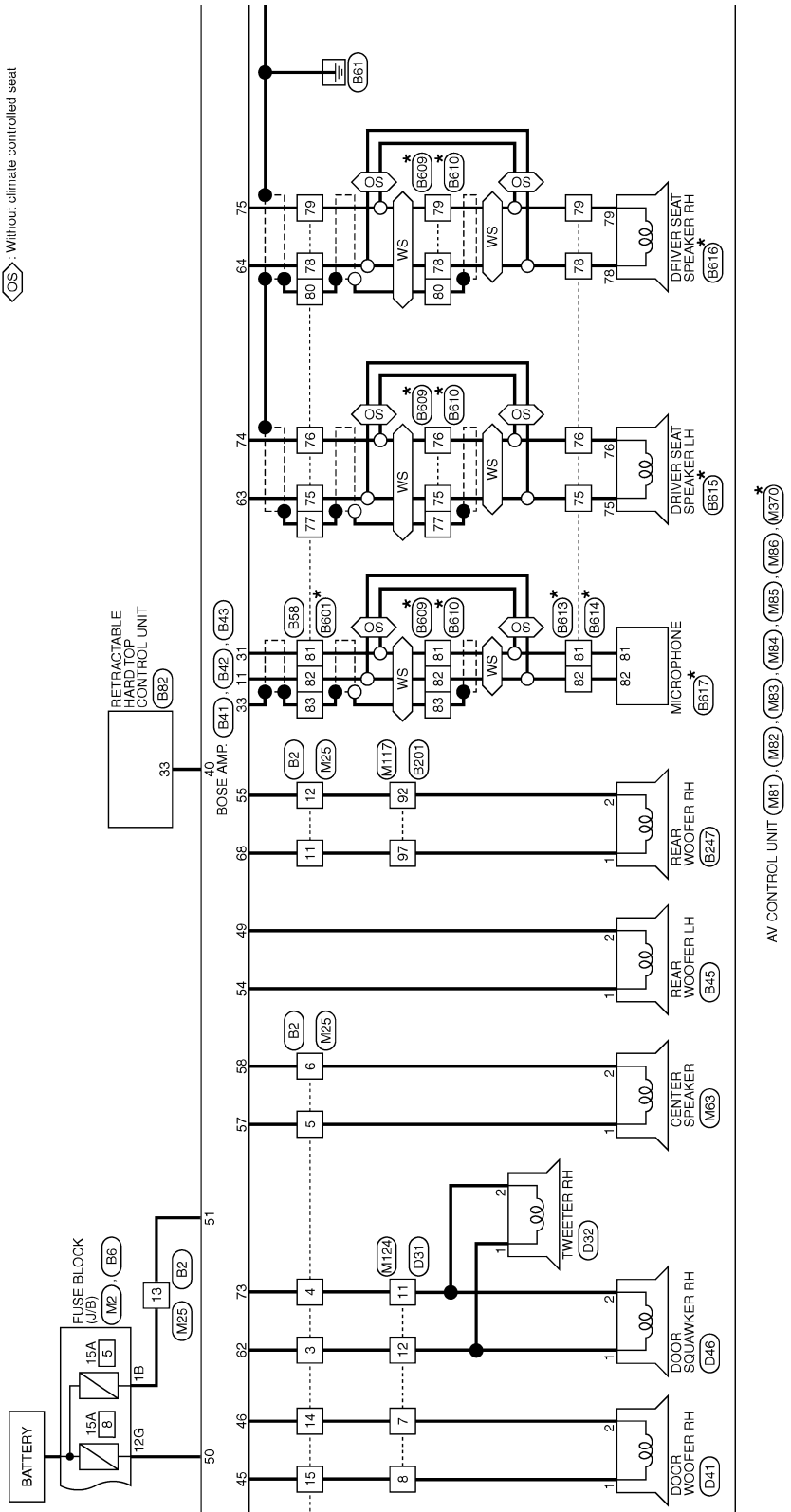
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

WS : With climate controlled seat  
OS : Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

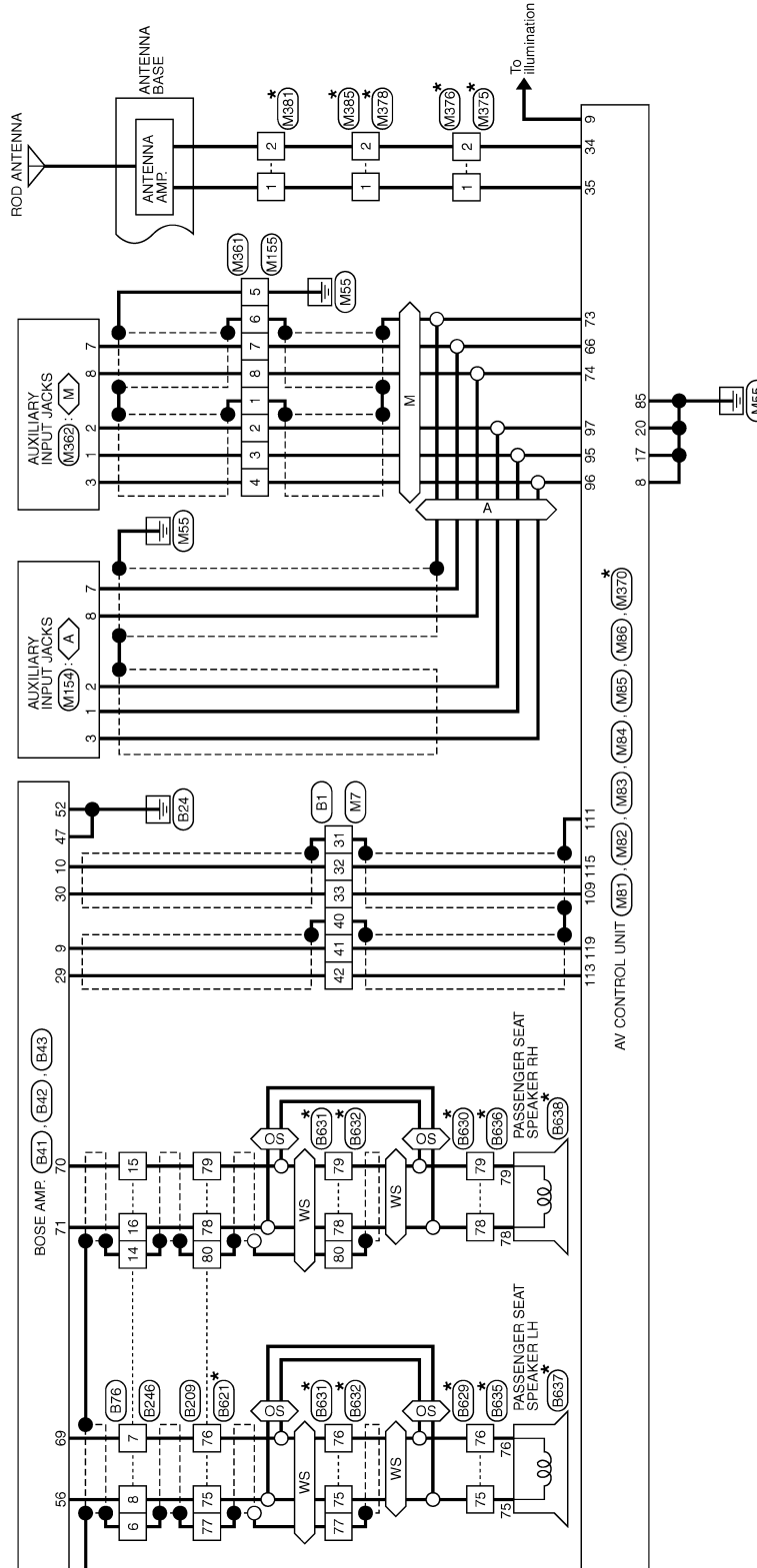
JCNWA2416GB

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

- A : With A/T
- M : With M/T
- WS : With climate controlled seat
- OS : Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

JCNWA2417GB

A  
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F  
G  
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L  
M  
N  
O  
P

AV

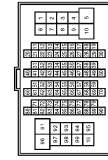
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH0DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
46	W	-
49	R	- [With BOSE system]
50	G	- [With BOSE system]
57	V	-
61	O	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-

15	G
16	W

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12G	Y	-

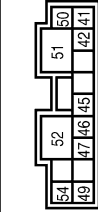
Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	P01FB-A



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

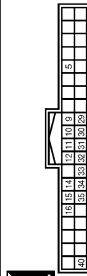
35	L
40	V

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SSA12FBR-SJA2



Terminal No.	Color of Wire	Signal Name [Specification]
41	B	SOUND SIGNAL DOOR WOOFER LH (+)
42	W	SOUND SIGNAL DOOR WOOFER LH (-)
45	G	SOUND SIGNAL DOOR WOOFER RH (+)
46	R	SOUND SIGNAL DOOR WOOFER RH (-)
47	B	GND
49	P	SOUND SIGNAL WOOFER REAR LH (-)
50	Y	BATTERY
51	GR	BATTERY
52	GR	GND
54	L	SOUND SIGNAL WOOFER REAR LH (+)

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	TH0DFW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
9	L	SOUND SIGNAL LH (-)
10	G	SOUND SIGNAL RH (-)
11	G	MICROPHONE SIGNAL (-)
14	R	AV COMM (L)
15	P	AV COMM (L)
16	W	ACC
29	P	SOUND SIGNAL LH (+)
30	R	SOUND SIGNAL RH (+)
31	Y	MICROPHONE SIGNAL (+)
33	SHIELD	SHIELD
34	G	AV COMM (H)

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B43
Connector Name	BOSE AMP.
Connector Type	SCA1PBR-SG44

74	73	72	71	70	69
64	63	62	59	58	55

71	Y	SOUND SIGNAL FR RH HEADREST RH (+)
72	W	SOUND SIGNAL FR LH HEADREST LH (-)
73	LG	SOUND SIGNAL FRONT RH (-)
74	Y	SOUND SIGNAL FR LH HEADREST LH (-)
75	B	SOUND SIGNAL FR LH HEADREST RH (-)

Connector No.	B45
Connector Name	REAR WOOFER LH
Connector Type	NS02FW-CS

2	1
---	---

Connector No.	B58
Connector Name	WIRE TO WIRE
Connector Type	NS10PBR-CS

82	83	78	76	81	92	85
81	80	79	75	77	94	90
100	93					

Terminal No.	Color of Wire	Signal Name [Specification]
55	O	SOUND SIGNAL WOOFER REAR RH (-)
56	W	SOUND SIGNAL FR RH HEADREST LH (+)
57	O	SOUND SIGNAL CENTER (+)
58	P	SOUND SIGNAL FRONT LH (-)
59	L	SOUND SIGNAL FRONT RH (+)
62	V	SOUND SIGNAL FR LH HEADREST LH (+)
63	G	SOUND SIGNAL FR LH HEADREST RH (+)
64	W	SOUND SIGNAL FR LH HEADREST RH (+)
68	LG	SOUND SIGNAL WOOFER REAR RH (+)
69	B	SOUND SIGNAL FR RH HEADREST LH (-)
70	G	SOUND SIGNAL FR RH HEADREST RH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
75	G	-
76	Y	-
77	SHIELD	-
78	W	-
79	B	-
80	SHIELD	-
81	Y	-
82	G	-
83	SHIELD	-

Connector No.	B76
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH

1	2	3	4	5	6	7	8
9	10	11	12	13	14	13	18

15	G	-
16	Y	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH08MMF-NH

1	2	3	4
5	6	7	8

Connector No.	B82
Connector Name	RETRACTABLE HARD TOP CONTROL UNIT
Connector Type	TH46PW-NH

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	SHIELD	-

Terminal No.	33
Color of Wire	V
Signal Name [Specification]	ROOF STATUS SIGNAL (AUDIO)

JCNWA2419GB

A  
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O  
P

AV

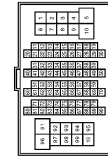
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

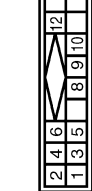
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
40	GR	-
41	LG	-
42	O	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	G	-
48	Y	-
49	SHIELD	-
50	P	-

Connector No.	B236
Connector Name	SATELLITE RADIO TUNER
Connector Type	A16FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	Y	REQUEST (SAT->CONT)
9	O	COMM (SAT->CONT)
10	BR	COMM (CONT->SAT)
12	SB	BATTERY
15	B	GND

60	L	-
61	O	-
62	GR	-
63	BR	-
64	V	-
65	SB	-
66	Y	-
67	L	-
68	P	-
80	G	-
81	R	-
82	W	-
83	B	-
84	SHIELD	-
85	O	-
86	BR	-
87	Y	-
88	SHIELD	-
89	SB	-
90	P	-
92	P	-
97	L	-

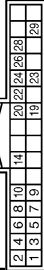
16	Y	ACC
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Connector No.	B209
Connector Name	WIRE TO WIRE
Connector Type	NS16FER-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	W	-
76	B	-
77	SHIELD	-
78	Y	-
79	G	-
80	SHIELD	-

Connector No.	B237
Connector Name	TEL ADAPTER UNIT
Connector Type	TH82FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BATTERY
2	LG	ACC
3	O	IGNITION
4	B	GND
5	SHIELD	SHIELD
6	SHIELD	SHIELD
7	B	MICROPHONE SIGNAL
8	R	MICROPHONE GND
9	Y	TEL VOICE SIGNAL (+)
10	G	TEL VOICE SIGNAL (-)
14	B	GND

19	B	GND
20	B	CONTROL SIGNAL
22	B	CONTROL SIGNAL
23	B	CONTROL SIGNAL
24	B	CONTROL SIGNAL
28	P	VEHICLE SPEED (8-PULSE)
29	W	MICROPHONE VCC

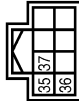
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	E238
Connector Name	TEL ADAPTER UNIT
Connector Type	TH8BFW-NH



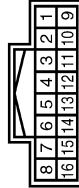
Terminal No.	Color of Wire	Signal Name [Specification]
35	L	AV COMM (H)
36	P	AV COMM (L)

Connector No.	E241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (H)
18	L	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

Connector No.	E246
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

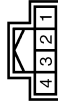
22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	OR	SENSOR SIGNAL 3
26	Y	VEHICLE SPEED (3-PULSE)
30	SR	ACC
31	B	GND
32	Y	BATTERY

Connector No.	E247
Connector Name	REAR WOOFER RH
Connector Type	NS32FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	E249
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

JCNWA2421GB

A  
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P

AV

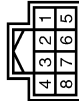
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B309
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	—
2	W	—
3	Y	—
4	SHIELD	—

Connector No.	B311
Connector Name	REAR VIEW CAMERA
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	CAMERA ON SIGNAL
2	W	GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	B471
Connector Name	TEL ADAPTER UNIT
Connector Type	GT16C-1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
33	—	TEL ANTENNA
34	SHIELD	SHIELD

Connector No.	B472
Connector Name	TEL ANTENNA
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	—	—
2	SHIELD	—

Connector No.	B482
Connector Name	SATELLITE RADIO TUNER
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
33	—	SATELLITE ANTENNA
34	SHIELD	SHIELD

Connector No.	B483
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
3	—	—
4	SHIELD	—

Connector No.	B601
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	—
76	L	—
77	B/Y	—
78	R	—
79	G	—
80	B/W	—
81	B	—
82	W	—
83	B/R	—

Connector No.	B609
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	—
76	L	—
77	B/Y	—
78	R	—
79	G	—
80	B/W	—
81	B	—
82	W	—
83	B/R	—



# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B610
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B611
Connector Name	WIRE TO WIRE
Connector Type	A08BW



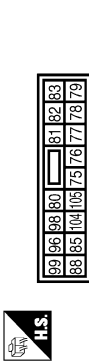
Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-
78	-	-
79	-	-
81	-	-
82	-	-

Connector No.	B613
Connector Name	WIRE TO WIRE
Connector Type	A08MW



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
78	R	-
79	G	-
81	B	-
82	W	-

Connector No.	B614
Connector Name	WIRE TO WIRE
Connector Type	TK02FGY



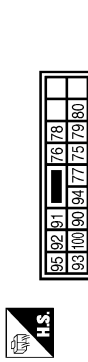
Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B616
Connector Name	DRIVER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B617
Connector Name	MICROPHONE
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
81	-	-
82	-	-

Connector No.	B621
Connector Name	WIRE TO WIRE
Connector Type	NS16MBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B629
Connector Name	WIRE TO WIRE
Connector Type	TK02MGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-

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AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B630
Connector Name	WIRE TO WIRE
Connector Type	TK02AW



Terminal No.	Color of Wire	Signal Name [Specification]
78	R	-
79	G	-

Connector No.	B631
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
76	P	-
77	L	-
78	B/Y	-
79	R	-
80	G	-
81	B/W	-

Connector No.	B632
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B635
Connector Name	WIRE TO WIRE
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B636
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B637
Connector Name	PASSENGER SEAT SPEAKER LH
Connector Type	TK02FGY



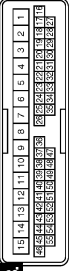
Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B638
Connector Name	PASSENGER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40PW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	W	-
12	L	-

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	Terminal No.	Color of Wire	Signal Name [Specification]
D2	1	L	TWEETER LH
	2	W	
Connector No.	D2		
Connector Name	TWEETER LH		
Connector Type	TK02MBF-P		
D11	1	G	DOOR WOOFER LH
	2	R	
Connector No.	D11		
Connector Name	DOOR WOOFER LH		
Connector Type	NS02FW-CS		
D16	1	L	DOOR SQUAWKER LH
	2	W	
Connector No.	D16		
Connector Name	DOOR SQUAWKER LH		
Connector Type	TK02FBR		
D31	7	R	WIRE TO WIRE
	8	G	
Connector No.	D31		
Connector Name	WIRE TO WIRE		
Connector Type	TH40FW-CS15		
D32	1	L	TWEETER RH
	2	W	
Connector No.	D32		
Connector Name	TWEETER RH		
Connector Type	TK02MBF-P		
D41	1	G	DOOR WOOFER RH
	2	R	
Connector No.	D41		
Connector Name	DOOR WOOFER RH		
Connector Type	NS02FW-CS		
D46	1	L	DOOR SQUAWKER RH
	2	W	
Connector No.	D46		
Connector Name	DOOR SQUAWKER RH		
Connector Type	TK02FBR		
E5	9	L	ILLUMINANT POWER DISTRIBUTION MODULE
	10	W	
Connector No.	E5		
Connector Name	ILLUMINANT POWER DISTRIBUTION MODULE		
Connector Type	TH20FW-CS12-M4-1V		

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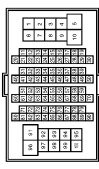
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]



## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-GS16-TM4


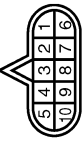
Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	
68	W	
88	O	

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH (WITH A/T)
Connector Type	TB01FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	

Connector No.	F55
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02FEB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	O	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
30	R	
31	R	
41	O	

Connector No.	F157
Connector Name	TOM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG



Terminal No.	Color of Wire	Signal Name [Specification]
7	L	REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS30FPW-M2

Terminal No.	Color of Wire	Signal Name [Specification]
ZA	G	
5A	L	

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FPV-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1B	V	— [Without NAV]

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# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



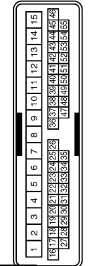
Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
46	SB	- [Without NAVI]
49	R	- [With BOSE system]
50	G	- [With BOSE system]
57	O	-
61	O	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



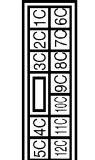
Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
69	G	-
89	O	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MM-CS15



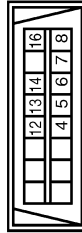
Terminal No.	Color of Wire	Signal Name [Specification]
7	W	-
8	B	-
11	W	-
12	L	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	R	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MM



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

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# AV CONTROL UNIT

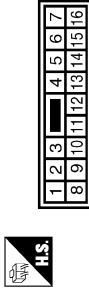
< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

15	G	-
16	W	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	SB	-
5	Y	-
6	LG	-
7	B	-
11	L	-
12	P	-
13	V	- [Without NAV]
14	R	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



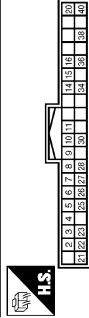
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M29
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

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# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

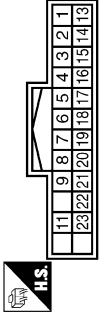
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Connector No.	M68
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS2FL-M2-LC



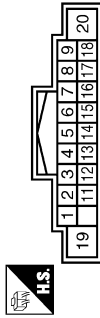
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	O	ACC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
11	P	COMM (CONT->DISP)
13	BR	INVERTER GND

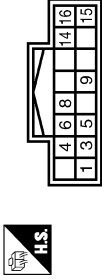
Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-GS2



Terminal No.	Color of Wire	Signal Name [Specification]
6	P	STRG SW A
7	V	ACC
8	B	GND
9	L	ILLUMINATION
15	B	STRG SW GND
16	L	STRG SW B
17	B	GND
18	Y	BATTERY
20	B	GND

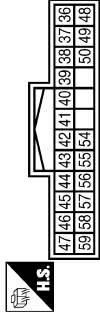
14	LG	SIGNAL GND
15	SR	COMPOSITE IMAGE SIGNAL
16	BR	COMPOSITE SYNC
17	G	RGB (RED) SIGNAL
18	P	RGB (BLUE) SIGNAL
19	W	RGB SYNC
20	G	VP
21	SHIELD	SHIELD
22	L	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	ACC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (BLUE) SIGNAL
39	L	RGB (GREEN) SIGNAL
40	G	RGB (RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (YS) SIGNAL
44	L	COMM (DISP->CONT)
45	R	HP
46	LG	SIGNAL GND

47	O	SIGNAL VCC
48	BR	COMPOSITE SYNC
49	Y	SHIELD
50	SHIELD	SHIELD
55	SHIELD	SHIELD
56	P	COMM (CONT->DISP)
57	G	VP
58	BR	INVERTER GND
59	Y	INVERTER VCC

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AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

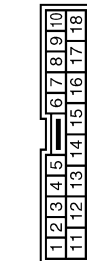
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH



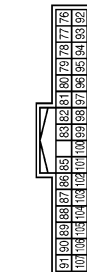
Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	GR	CAMERA CONNECTION RECOGNITION
73	B	SHIELD
74	R	AUX IMAGE GND

Connector No.	M106
Connector Name	WIRE TO WIRE
Connector Type	TK-0MW-NSB



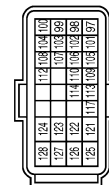
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	- [Without NAVI]
2	W	- [Without NAVI]
3	R	- [Without NAVI]

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
79	P	TEL VOICE SIGNAL (-)
80	L	TEL VOICE SIGNAL (+)
81	SHIELD	SHIELD
82	G	iPod SOUND SIGNAL RH (-)
83	B	iPod SOUND SIGNAL RH (+)
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	G	AV COMM (H) [With BOSE system]
89	R	AV COMM (L) [With BOSE system]
90	SB	AV COMM (H) [With BOSE system]

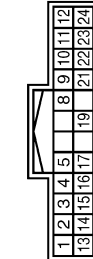
Connector No.	M107
Connector Name	ECM
Connector Type	RN24FGY-R26-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

Terminal No.	Color of Wire	Signal Name [Specification]
91	Y	AV COMM (L) [With BOSE system]
95	R	AUX SOUND SIGNAL RH (+)
96	W	AUX SOUND SIGNAL LH (+)
97	B	AUX SOUND SIGNAL GND
98	W	iPod SOUND SIGNAL LH (-)
99	R	iPod SOUND SIGNAL LH (+)
100	SHIELD	SHIELD
101	BR	SW GND
103	SB	DISK EJECT SIGNAL
104	G	IGNITION
105	O	REVERSE
106	SB	PARKING BRAKE
107	GR	VEHICLE SPEED (3-PULSE)

Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod ADAPTER->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTIFY
12	W	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

Connector No.	M86
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH25FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
109	R	SOUND SIGNAL RH (+)
111	B	SHIELD
113	P	SOUND SIGNAL LH (-)
115	G	SOUND SIGNAL RH (-)
119	L	SOUND SIGNAL LH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
14	C	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	R	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)



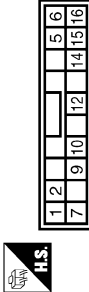
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M112
Connector Name	iPod SIDE (WITH A-7)
Connector Type	IP18FY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M114
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	O	-
4	SHIELD	-
5	W	-
6	B	-
7	R	-
8	BR	-
9	W	-
10	W	-
11	SHIELD	-

12	P	-
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Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MW-NS10



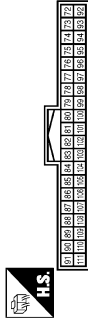
Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH8MW-CS16-TM4



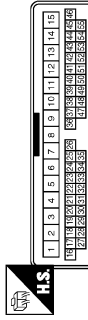
Terminal No.	Color of Wire	Signal Name [Specification]
40	Y	-
41	G	-
42	LG	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	P	-
48	I	-
49	SHIELD	-
50	V	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	SB	-
12	BR	-

JCNWA2431GB

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AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

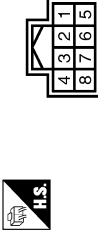
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M155
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	B	
6	SHIELD	
7	G	
8	R	

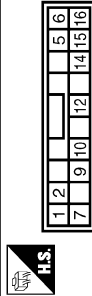
Connector No.	M181
Connector Name	WIRE TO WIRE
Connector Type	TH12MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	G	
3	O	
4	SHIELD	
5	W	
6	B	
7	R	
8	BR	
9	W	
10	L	
11	SHIELD	

12	P	-
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Connector No.	M182
Connector Name	iPod SIDE (WITH M/T)
Connector Type	IP18FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	L	iPod CONNECTION RECOGNITION GND
10	BR	CHARGE POWER
12	W	SHIELD
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTITY

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	-	
15	-	
17	-	

Connector No.	M361
Connector Name	WIRE TO WIRE
Connector Type	TH08MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	SHIELD	
6	SHIELD	
7	G	
8	R	

Connector No.	M362
Connector Name	AUXILIARY INPUT JACKS (WITH M/T)
Connector Type	A08FW



















Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>M370</td></tr> <tr><td>Connector Name</td><td>AV CONTROL UNIT (WITHOUT NAVI)</td></tr> <tr><td>Connector Type</td><td>GT13SH-2 /S-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>34</td></tr> <tr><td>Color of Wire</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>AM-FM MAIN</td></tr> <tr><td>Terminal No.</td><td>35</td></tr> <tr><td>Color of Wire</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>ANTENNA AMP_ON SIGNAL</td></tr> </table>	Connector No.	M370	Connector Name	AV CONTROL UNIT (WITHOUT NAVI)	Connector Type	GT13SH-2 /S-HU	Terminal No.	34	Color of Wire	-	Signal Name [Specification]	AM-FM MAIN	Terminal No.	35	Color of Wire	-	Signal Name [Specification]	ANTENNA AMP_ON SIGNAL	<table border="1"> <tr><td>Connector No.</td><td>M375</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SSH-1 /IPP-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Connector No.	M375	Connector Name	WIRE TO WIRE	Connector Type	GT13SSH-1 /IPP-HU	Terminal No.	1	Color of Wire	-	Signal Name [Specification]	-	Terminal No.	2	Color of Wire	-	Signal Name [Specification]	-	<table border="1"> <tr><td>Connector No.</td><td>M376</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SS-1 /S-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Connector No.	M376	Connector Name	WIRE TO WIRE	Connector Type	GT13SS-1 /S-HU	Terminal No.	1	Color of Wire	-	Signal Name [Specification]	-	Terminal No.	2	Color of Wire	-	Signal Name [Specification]	-	<table border="1"> <tr><td>Connector No.</td><td>M378</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SSN-1 /IPP-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Connector No.	M378	Connector Name	WIRE TO WIRE	Connector Type	GT13SSN-1 /IPP-HU	Terminal No.	1	Color of Wire	-	Signal Name [Specification]	-	Terminal No.	2	Color of Wire	-	Signal Name [Specification]	-												
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AV

DTC Index

SELF-DIAGNOSIS RESULTS DISPLAY ITEM

JCNWA2433GB

INFOID:000000004371654

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

DTC	Display item	Refer to
U1000	CAN COMM CIRCUIT [U1000]	<a href="#">AV-210, "DTC Logic"</a>
U1010	CONTROL UNIT (CAN) [U1010]	<a href="#">AV-211, "DTC Logic"</a>
U1310	CONTROL UNIT (AV) [U1310]	<a href="#">AV-212, "DTC Logic"</a>
U1200	Cont Unit FLASH-ROM [U1200]	<a href="#">AV-213, "DTC Logic"</a>
U1216	CAN CONT [U1216]	<a href="#">AV-214, "DTC Logic"</a>
U1231	AMP TEMP [U1231]	<a href="#">AV-215, "DTC Logic"</a>
U1243	FRONT DISP CONN [U1243]	<a href="#">AV-216, "DTC Logic"</a>
U1250	CAMERA CONT CONN [U1250]	<a href="#">AV-218, "DTC Logic"</a>
U1255	SAT CONN [U1255]	<a href="#">AV-219, "DTC Logic"</a>
U1260	CENTER SP OPEN [U1260]	<a href="#">AV-221, "DTC Logic"</a>
U1261	CENTER SP SHORT [U1261]	<a href="#">AV-221, "DTC Logic"</a>
U1262	CENTER SP GND-SHORT [U1262]	<a href="#">AV-221, "DTC Logic"</a>
U1263	CENTER SP VB-SHORT [U1263]	<a href="#">AV-221, "DTC Logic"</a>
U1264	FR-DOOR SP OPEN [U1264]	<a href="#">AV-222, "DTC Logic"</a>
U1265	FR-DOOR SP SHORT [U1265]	<a href="#">AV-222, "DTC Logic"</a>
U1266	FR-DOOR SP GND-SHORT [U1266]	<a href="#">AV-222, "DTC Logic"</a>
U1267	FR-DOOR SP VB-SHORT [U1267]	<a href="#">AV-222, "DTC Logic"</a>
U1268	RR-SP/FR-WOOFER OPEN [U1268]	<a href="#">AV-223, "DTC Logic"</a>
U1269	RR-SP/FR-WOOFER SHORT [U1269]	<a href="#">AV-223, "DTC Logic"</a>
U126A	RR-SP/FR-WOOFER GND-SHORT [U126A]	<a href="#">AV-223, "DTC Logic"</a>
U126B	RR-SP/FR-WOOFER VB-SHORT [U126B]	<a href="#">AV-223, "DTC Logic"</a>
U126C	RR-SURROUND SP OPEN [U126C]	<a href="#">AV-224, "DTC Logic"</a>
U126D	RR-SURROUND SP SHORT [U126D]	<a href="#">AV-224, "DTC Logic"</a>
U126E	RR-SURROUND SP GND-SHORT [U126E]	<a href="#">AV-224, "DTC Logic"</a>
U126F	RR-SURROUND SP VB-SHORT [U126F]	<a href="#">AV-224, "DTC Logic"</a>
U1274	RL-SURROUND SP OPEN [U1274]	<a href="#">AV-225, "DTC Logic"</a>
U1275	RL-SURROUND SP SHORT [U1275]	<a href="#">AV-225, "DTC Logic"</a>
U1276	RL-SURROUND SP GND-SHORT [U1276]	<a href="#">AV-225, "DTC Logic"</a>
U1277	RL-SURROUND SP VB-SHORT [U1277]	<a href="#">AV-225, "DTC Logic"</a>
U1278	RL-SP/FL-WOOFER OPEN [U1278]	<a href="#">AV-226, "DTC Logic"</a>
U1279	RL-SP/FL-WOOFER SHORT [U1279]	<a href="#">AV-226, "DTC Logic"</a>
U127A	RL-SP/FL-WOOFER GND-SHORT [U127A]	<a href="#">AV-226, "DTC Logic"</a>
U127B	RL-SP/FL-WOOFER VB-SHORT [U127B]	<a href="#">AV-226, "DTC Logic"</a>
U127C	FL-DOOR SP OPEN [U127C]	<a href="#">AV-227, "DTC Logic"</a>
U127D	FL-DOOR SP SHORT [U127D]	<a href="#">AV-227, "DTC Logic"</a>
U127E	FL-DOOR SP GND-SHORT [U127E]	<a href="#">AV-227, "DTC Logic"</a>
U127F	FL-DOOR SP VB-SHORT [U127F]	<a href="#">AV-227, "DTC Logic"</a>
U1280	FL-SEAT L-SP OPEN [U1280]	<a href="#">AV-228, "DTC Logic"</a>
U1281	FL-SEAT L-SP SHORT [U1281]	<a href="#">AV-228, "DTC Logic"</a>
U1282	FL-SEAT L-SP GND-SHORT [U1282]	<a href="#">AV-228, "DTC Logic"</a>
U1283	FL-SEAT L-SP VB-SHORT [U1283]	<a href="#">AV-228, "DTC Logic"</a>

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

DTC	Display item	Refer to
U1284	FL-SEAT R-SP OPEN [U1284]	<a href="#">AV-229, "DTC Logic"</a>
U1285	FL-SEAT R-SP SHORT [U1285]	<a href="#">AV-229, "DTC Logic"</a>
U1286	FL-SEAT R-SP GND-SHORT [U1286]	<a href="#">AV-229, "DTC Logic"</a>
U1287	FL-SEAT R-SP VB-SHORT [U1287]	<a href="#">AV-229, "DTC Logic"</a>
U1288	FR-SEAT L-SP OPEN [U1288]	<a href="#">AV-230, "DTC Logic"</a>
U1289	FR-SEAT L-SP SHORT [U1289]	<a href="#">AV-230, "DTC Logic"</a>
U128A	FR-SEAT L-SP GND-SHORT [U128A]	<a href="#">AV-230, "DTC Logic"</a>
U128B	FR-SEAT L-SP VB-SHORT [U128B]	<a href="#">AV-230, "DTC Logic"</a>
U128C	FR-SEAT R-SP OPEN [U128C]	<a href="#">AV-231, "DTC Logic"</a>
U128D	FR-SEAT R-SP SHORT [U128D]	<a href="#">AV-231, "DTC Logic"</a>
U128E	FR-SEAT R-SP GND-SHORT [U128E]	<a href="#">AV-231, "DTC Logic"</a>
U128F	FR-SEAT R-SP VB-SHORT [U128F]	<a href="#">AV-231, "DTC Logic"</a>
U1290	CORRECT MICRO OPEN [U1290]	<a href="#">AV-232, "DTC Logic"</a>
U1291	CORRECT MICRO SHORT [U1291]	<a href="#">AV-232, "DTC Logic"</a>
U1292	CORRECT MICRO GND-SHORT [U1292]	<a href="#">AV-232, "DTC Logic"</a>
U1293	CORRECT MICRO VB-SHORT [U1293]	<a href="#">AV-232, "DTC Logic"</a>
U1300 U1240	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• SWITCH CONN [U1240]</li> </ul>	<a href="#">AV-234, "Description"</a>
U1300 U124E	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• AMP CONN [U124E]</li> </ul>	<a href="#">AV-234, "Description"</a>
U1300 U1252	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> </ul>	<a href="#">AV-234, "Description"</a>
U1300 U1254	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• IPOD CONN [U1254]</li> </ul>	<a href="#">AV-234, "Description"</a>
U1300 U1256	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• HAND FREE CONN [U1256]</li> </ul>	<a href="#">AV-234, "Description"</a>
U1300 U1252 U1256	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> <li>• HAND FREE CONN [U1256]</li> </ul>	<a href="#">AV-234, "Description"</a>
U1300 U1252 U1256 U124E	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> <li>• HAND FREE CONN [U1256]</li> <li>• AMP CONN [U124E]</li> </ul>	<a href="#">AV-234, "Description"</a>
U1300 U1252 U1254 U1256 U124E	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> <li>• IPOD CONN [U1254]</li> <li>• HAND FREE CONN [U1256]</li> <li>• AMP CONN [U124E]</li> </ul>	<a href="#">AV-234, "Description"</a>
U1300 U1240 U1252 U1254 U1256 U124E	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• SWITCH CONN [U1240]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> <li>• IPOD CONN [U1254]</li> <li>• HAND FREE CONN [U1256]</li> <li>• AMP CONN [U124E]</li> </ul>	<a href="#">AV-234, "Description"</a>

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# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

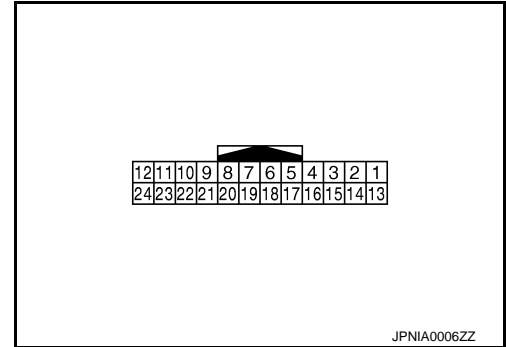
[BOSE AUDIO WITHOUT NAVIGATION]

## DISPLAY UNIT

Reference Value

INFOID:000000004929170

### TERMINAL LAYOUT



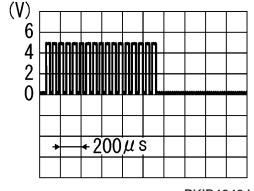
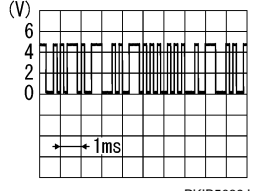
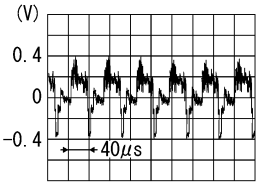
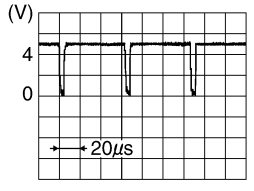
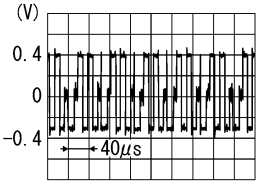
### PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
1 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
2 (Y)	Ground	Inverter VCC	Input	Ignition switch ACC	—	9.0 V
3 (O)	Ground	Signal VCC	Input	Ignition switch ACC	—	9.0 V
5 (Y)	—	Shield	—	—	—	—
6 (L)	Ground	RGB signal (G: green)	Input	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting “Color Spectrum Bar” on DISPLAY DIAGNOSIS screen.	 SKIB2236J
7	—	Shield	—	—	—	—
8 (R)	Ground	Horizontal synchronizing (HP) signal	Output	Ignition switch ON	—	 SKIB3601E

# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

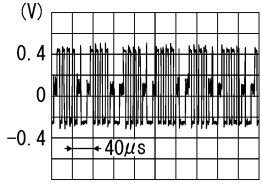
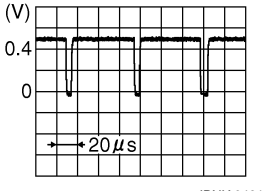
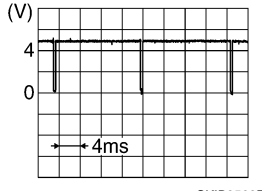
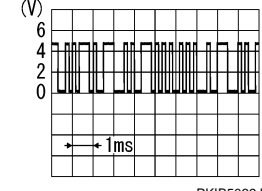
Terminal (Wire color)		Description		Condition	Reference value (Approx.)
+	-	Signal name	Input/ Output		
9 (B)	Ground	RGB area (YS) signal	Input	Ignition switch ON	At RGB image is displayed. 5.0 V
				Ignition switch ON	At rear view camera image is displayed.  PKIB4948J
11 (P)	Ground	Communication signal (CONT→DISP)	Input	Ignition switch ON	When adjusting display brightness.  PKIB5039J
13 (BR)	Ground	Inverter ground	—	Ignition switch ON	— 0 V
14 (LG)	Ground	Signal ground	—	Ignition switch ON	— 0 V
15 (SB)	4 (V)	Composite image signal	Input	Ignition switch ON	At camera image is displayed.  SKIB2251J
16 (BR)	Ground	Composite synchronizing signal	Input	Ignition switch ON	When camera image is displayed.  SKIB0825E
17 (G)	Ground	RGB signal (R: red)	Input	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.  SKIB2238J

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# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
18 (P)	Ground	RGB signal (B: blue)	Input	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>SKIB2237J</p>
19 (W)	Ground	RGB synchronizing signal	Input	Ignition switch ON	—	 <p>JPNIA0461GB</p>
20 (G)	Ground	Vertical synchronizing (VP) signal	Output	Ignition switch ON	—	 <p>SKIB3598E</p>
21	—	Shield	—	—	—	—
22 (L)	Ground	Communication signal (DISP→CONT)	Output	Ignition switch ON	When adjusting display brightness.	 <p>PKIB5039J</p>
23	—	Shield	—	—	—	—

## Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM -

INFOID:000000004928943

### NOTE:



# DISPLAY UNIT

[BOSE AUDIO WITHOUT NAVIGATION]

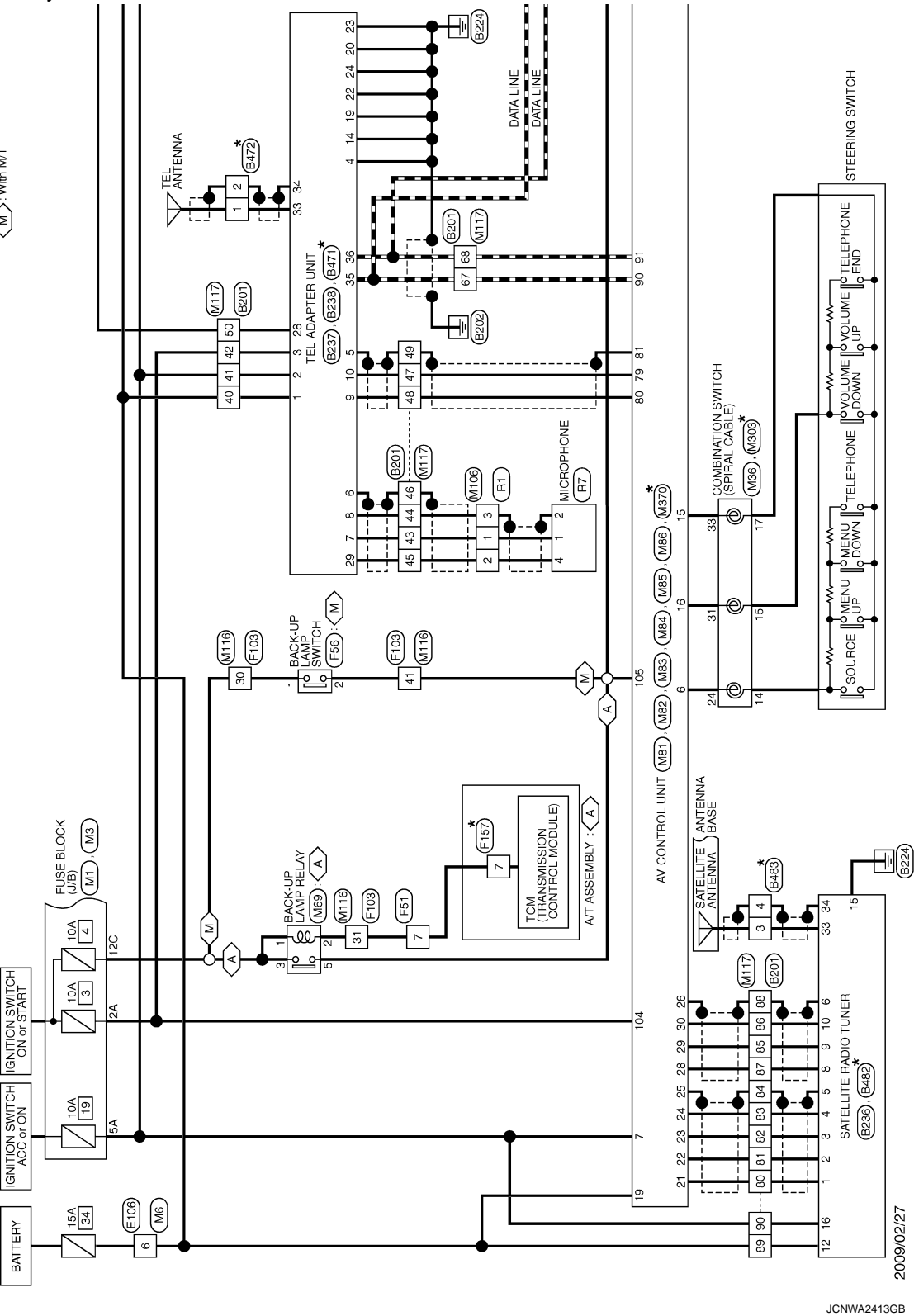
< ECU DIAGNOSIS INFORMATION >

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

⬠ : With A/T  
⬢ : With M/T

\*: This connector is not shown in "Harness Layout".



2009/02/27

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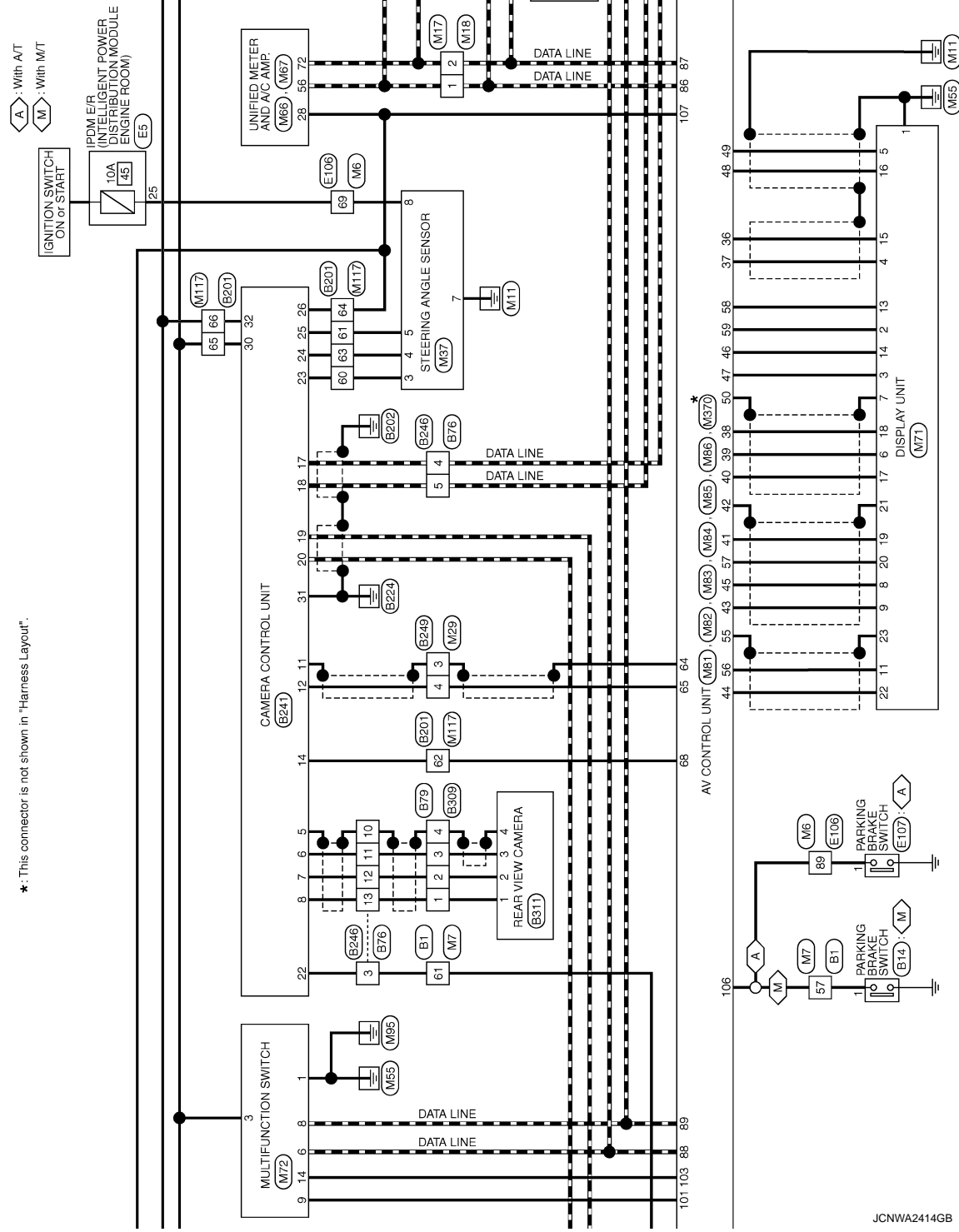
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# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

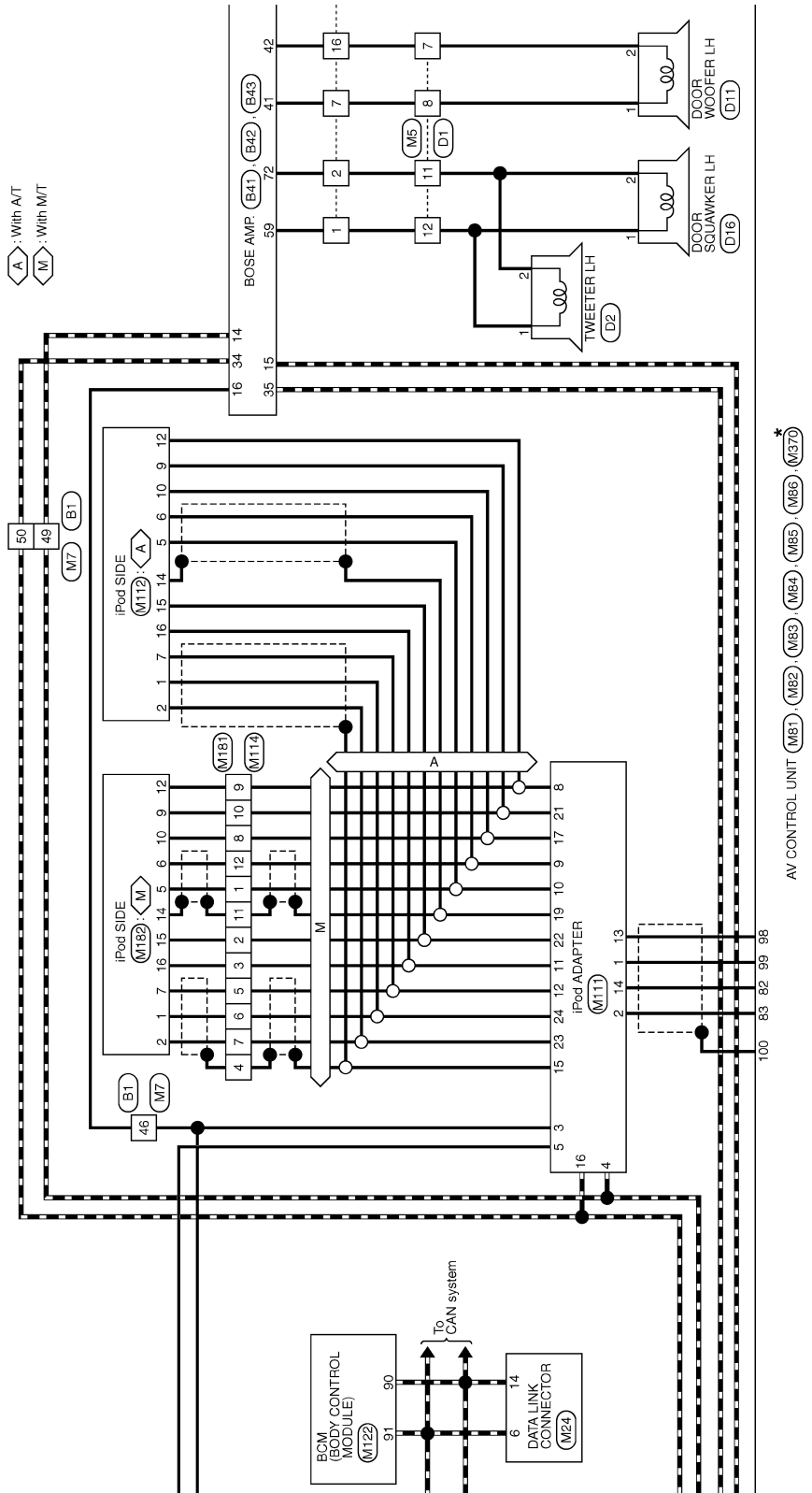


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# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]



\*: This connector is not shown in "Harness Layout".

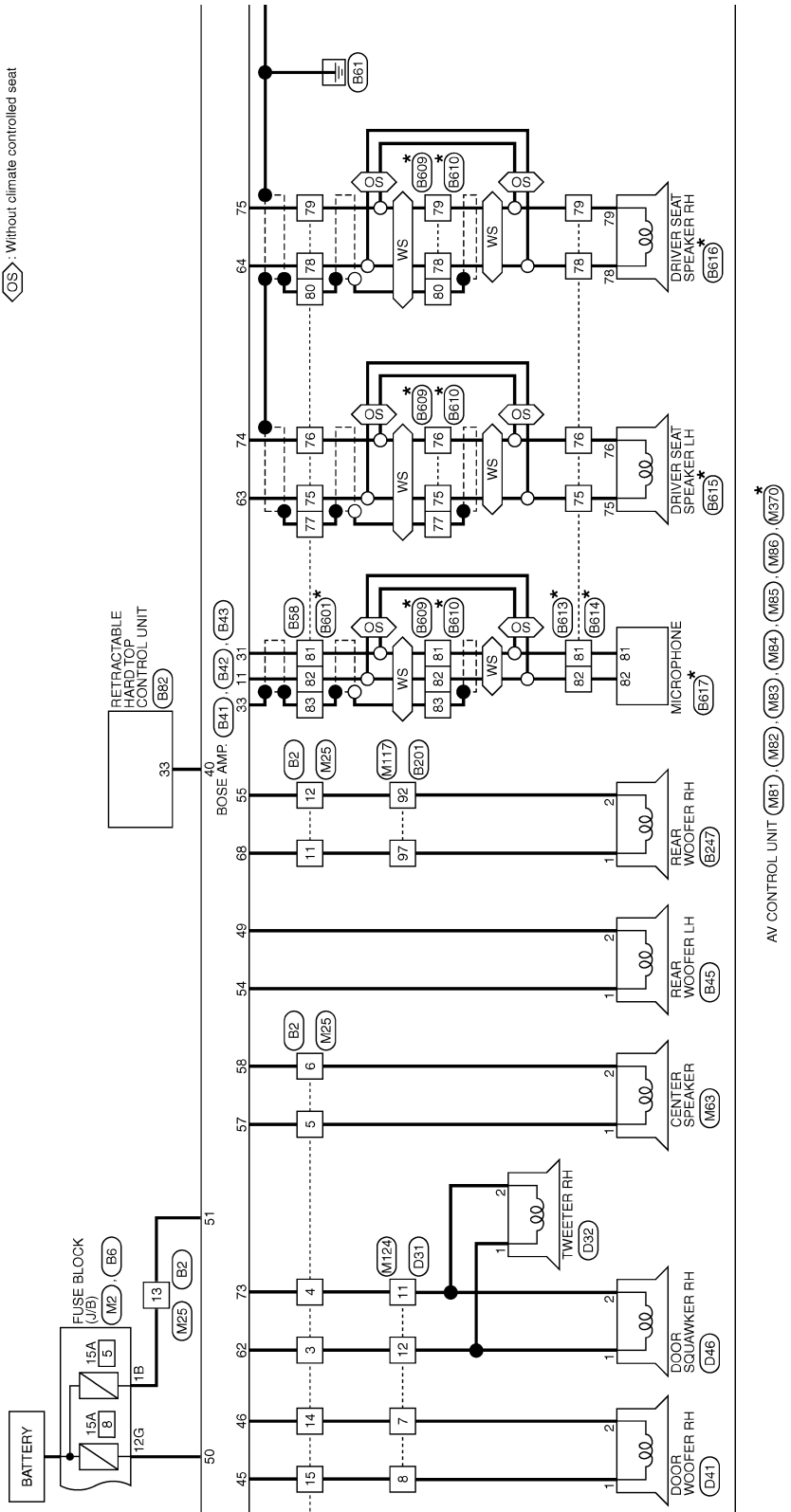
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# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

WS: With climate controlled seat  
 OS: Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

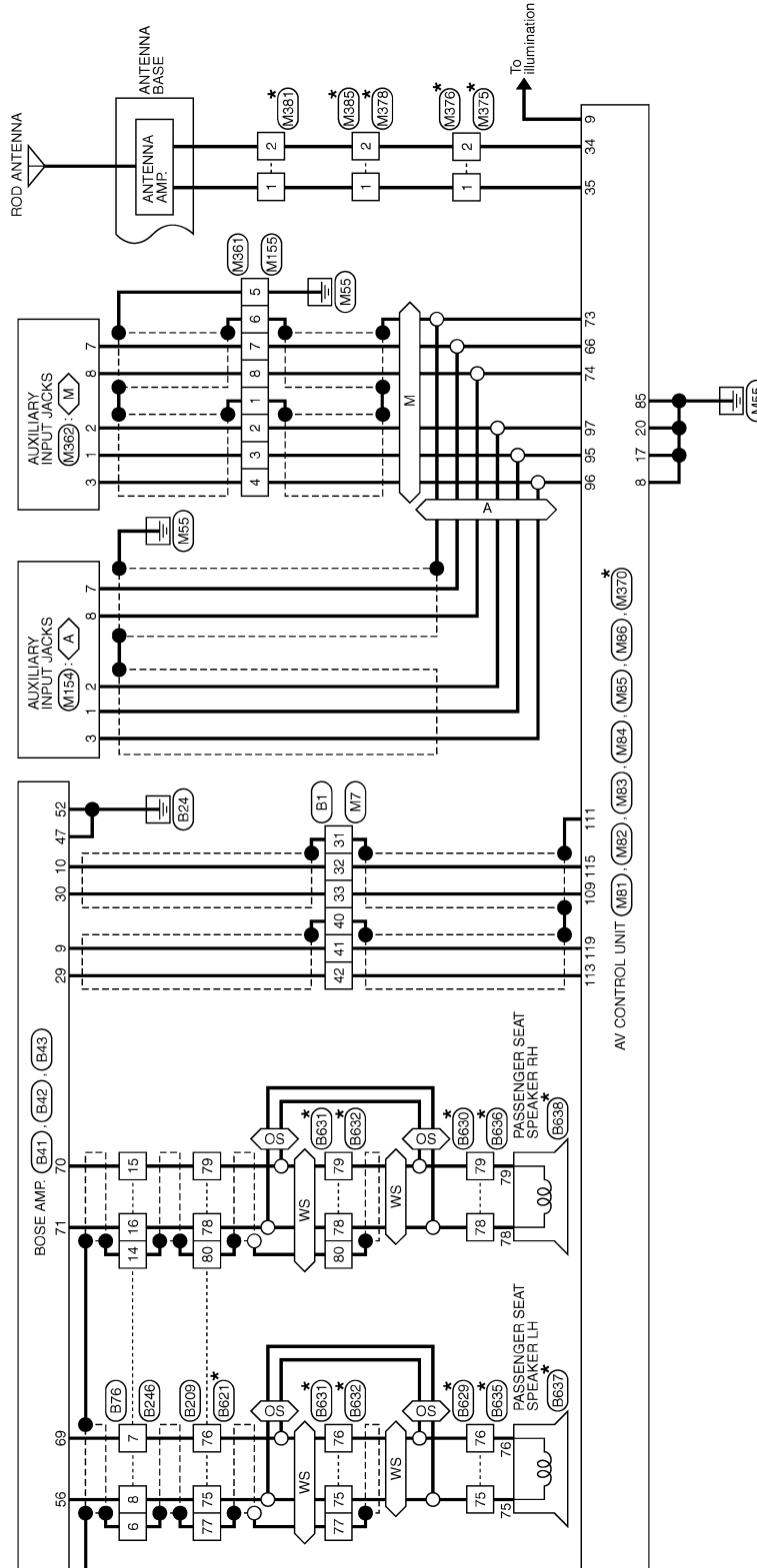
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# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

- : With A/T
- : With M/T
- : With climate controlled seat
- : Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

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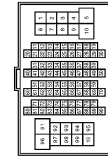
# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH0DFW-GS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
46	W	-
49	R	- [With BOSE system]
50	G	- [With BOSE system]
57	V	-
61	O	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-

15	G
16	W

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-GS



Terminal No.	Color of Wire	Signal Name [Specification]
12G	Y	-

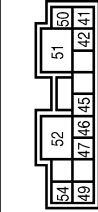
Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	P01FB-A



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

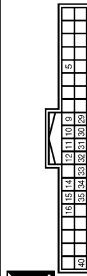
35	L
40	V

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SSA12FBR-SJA2



Terminal No.	Color of Wire	Signal Name [Specification]
41	B	SOUND SIGNAL DOOR WOOFER LH (+)
42	W	SOUND SIGNAL DOOR WOOFER LH (-)
45	G	SOUND SIGNAL DOOR WOOFER RH (+)
46	R	SOUND SIGNAL DOOR WOOFER RH (-)
47	B	GND
49	P	SOUND SIGNAL WOOFER REAR LH (-)
50	Y	BATTERY
51	GR	BATTERY
52	B	GND
54	L	SOUND SIGNAL WOOFER REAR LH (+)

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	TH0DFW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
9	L	SOUND SIGNAL LH (-)
10	G	SOUND SIGNAL RH (-)
11	G	MICROPHONE SIGNAL (-)
14	R	AV COMM (L)
15	P	AV COMM (L)
16	W	ACC
29	P	SOUND SIGNAL LH (+)
30	R	SOUND SIGNAL RH (+)
31	Y	MICROPHONE SIGNAL (+)
33	SHIELD	SHIELD
34	G	AV COMM (H)

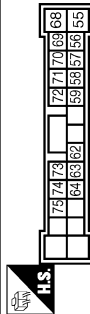
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< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B43
Connector Name	BOSE AMP.
Connector Type	SCA1PBR-SG44



71	Y	SOUND SIGNAL FR RH HEADREST RH (+)
72	W	SOUND SIGNAL FR RH HEADREST LH (-)
73	LG	SOUND SIGNAL FRONT RH (-)
74	Y	SOUND SIGNAL FR LH HEADREST LH (-)
75	B	SOUND SIGNAL FR LH HEADREST RH (-)

Connector No.	B45
Connector Name	REAR WOOFER LH
Connector Type	NS02FW-CS



Connector No.	B58
Connector Name	WIRE TO WIRE
Connector Type	NS10PBR-CS

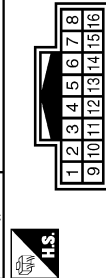


Terminal No.	Color of Wire	Signal Name [Specification]
55	O	SOUND SIGNAL WOOFER REAR RH (-)
56	W	SOUND SIGNAL FR RH HEADREST LH (+)
57	O	SOUND SIGNAL CENTER (+)
58	P	SOUND SIGNAL CENTER (-)
59	L	SOUND SIGNAL FRONT LH (+)
62	V	SOUND SIGNAL FRONT RH (+)
63	G	SOUND SIGNAL FR LH HEADREST LH (+)
64	W	SOUND SIGNAL FR LH HEADREST RH (+)
68	LG	SOUND SIGNAL WOOFER REAR RH (+)
69	B	SOUND SIGNAL FR RH HEADREST LH (-)
70	G	SOUND SIGNAL FR RH HEADREST RH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

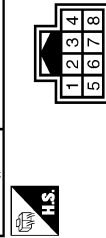
Terminal No.	Color of Wire	Signal Name [Specification]
75	G	-
76	Y	-
77	SHIELD	-
78	W	-
79	B	-
80	SHIELD	-
81	Y	-
82	G	-
83	SHIELD	-

Connector No.	B76
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH

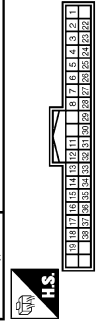


15	G	-
16	Y	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH08MMF-NH



Connector No.	B82
Connector Name	RETRACTABLE HARD TOP CONTROL UNIT
Connector Type	TH46PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	SHIELD	-

Terminal No.	33
Color of Wire	V
Signal Name [Specification]	ROOF STATUS SIGNAL (AUDIO)

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# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

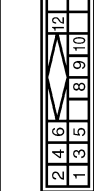
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
40	GR	-
41	LG	-
42	O	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	G	-
48	Y	-
49	SHIELD	-
50	P	-

Connector No.	B236
Connector Name	SATELLITE RADIO TUNER
Connector Type	A16FW



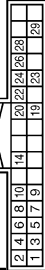
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	Y	REQUEST (SAT->CONT)
9	O	COMM (SAT->CONT)
10	BR	COMM (CONT->SAT)
12	SB	BATTERY
15	B	GND

Connector No.	B209
Connector Name	WIRE TO WIRE
Connector Type	NS16FER-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	W	-
76	B	-
77	SHIELD	-
78	Y	-
79	G	-
80	SHIELD	-

Connector No.	B237
Connector Name	TEL ADAPTER UNIT
Connector Type	TH82FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BATTERY
2	LG	ACC
3	O	IGNITION
4	B	GND
5	SHIELD	SHIELD
6	SHIELD	SHIELD
7	B	MICROPHONE SIGNAL
8	R	MICROPHONE GND
9	Y	TEL VOICE SIGNAL (+)
10	G	TEL VOICE SIGNAL (-)
14	B	GND

19	B	GND
20	B	CONTROL SIGNAL
22	B	CONTROL SIGNAL
23	B	CONTROL SIGNAL
24	B	CONTROL SIGNAL
28	P	VEHICLE SPEED (8-PULSE)
29	W	MICROPHONE VCC

16	Y	ACC
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# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

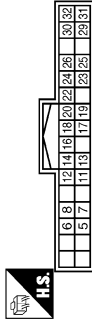
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	E238
Connector Name	TEL ADAPTER UNIT
Connector Type	TH08FW-NH



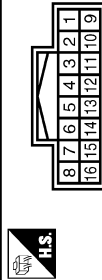
Terminal No.	Color of Wire	Signal Name [Specification]
35	L	AV COMM (H)
36	P	AV COMM (L)

Connector No.	E241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH02FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

Connector No.	E246
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	OR	SENSOR SIGNAL 3
26	Y	VEHICLE SPEED (3-PULSE)
28	SB	ACC
30	B	GND
31	B	BATTERY
32	Y	BATTERY

Connector No.	E247
Connector Name	REAR WOOFER RH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	E249
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

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## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B309
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	—
2	W	—
3	Y	—
4	SHIELD	—

Connector No.	B311
Connector Name	REAR VIEW CAMERA
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	CAMERA ON SIGNAL
2	W	GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	B471
Connector Name	TEL ADAPTER UNIT
Connector Type	GT16C-1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
33	—	TEL ANTENNA
34	SHIELD	SHIELD

Connector No.	B472
Connector Name	TEL ANTENNA
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	—	—
2	SHIELD	—

Connector No.	B482
Connector Name	SATELLITE RADIO TUNER
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
33	—	SATELLITE ANTENNA
34	SHIELD	SHIELD

Connector No.	B483
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
3	—	—
4	SHIELD	—

Connector No.	B601
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	—
76	L	—
77	B/Y	—
78	R	—
79	G	—
80	B/W	—
81	B	—
82	W	—
83	B/R	—

Connector No.	B609
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	—
76	L	—
77	B/Y	—
78	R	—
79	G	—
80	B/W	—
81	B	—
82	W	—
83	B/R	—

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[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B610
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B613
Connector Name	WIRE TO WIRE
Connector Type	A08MW



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
78	R	-
79	G	-
81	B	-
82	W	-

Connector No.	B614
Connector Name	WIRE TO WIRE
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-
78	-	-
79	-	-
81	-	-
82	-	-

Connector No.	B615
Connector Name	DRIVER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B616
Connector Name	DRIVER SEAT SPEAKER RH
Connector Type	TK02FW



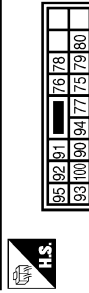
Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B617
Connector Name	MICROPHONE
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
81	-	-
82	-	-

Connector No.	B621
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B629
Connector Name	WIRE TO WIRE
Connector Type	TK02MGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-

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A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B630
Connector Name	WIRE TO WIRE
Connector Type	TK02AW



Terminal No.	Color of Wire	Signal Name [Specification]
78	R	-
79	G	-

Connector No.	B631
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B632
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B635
Connector Name	WIRE TO WIRE
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B636
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B637
Connector Name	PASSENGER SEAT SPEAKER LH
Connector Type	TK02FGY



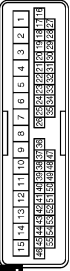
Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B638
Connector Name	PASSENGER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-








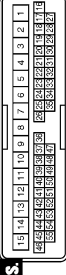







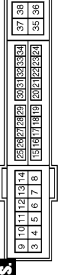
Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40PW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	W	-
12	L	-

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**BOSE AUDIO WITHOUT NAVIGATION SYSTEM**

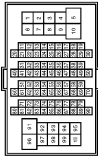
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Connector No.	D2																							
Connector Name	TWEETER LH																							
Connector Type	TK02MRF-P																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D11</td></tr> <tr><td>Connector Name</td><td>DOOR WOOFER LH</td></tr> <tr><td>Connector Type</td><td>NS02FW-CS</td></tr> </table>  	Connector No.	D11	Connector Name	DOOR WOOFER LH	Connector Type	NS02FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>G</td><td>R</td></tr> </table>	Terminal No.	1	2	Color of Wire	G	R	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D11																							
Connector Name	DOOR WOOFER LH																							
Connector Type	NS02FW-CS																							
Terminal No.	1	2																						
Color of Wire	G	R																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D16</td></tr> <tr><td>Connector Name</td><td>DOOR SQUAWKER LH</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table>  	Connector No.	D16	Connector Name	DOOR SQUAWKER LH	Connector Type	TK02FBR	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D16																							
Connector Name	DOOR SQUAWKER LH																							
Connector Type	TK02FBR																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D31</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40FW-CS15</td></tr> </table>  	Connector No.	D31	Connector Name	WIRE TO WIRE	Connector Type	TH40FW-CS15	<table border="1"> <tr><td>Terminal No.</td><td>7</td><td>8</td><td>11</td><td>12</td></tr> <tr><td>Color of Wire</td><td>R</td><td>G</td><td>W</td><td>L</td></tr> </table>	Terminal No.	7	8	11	12	Color of Wire	R	G	W	L	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]					
Connector No.	D31																							
Connector Name	WIRE TO WIRE																							
Connector Type	TH40FW-CS15																							
Terminal No.	7	8	11	12																				
Color of Wire	R	G	W	L																				
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D32</td></tr> <tr><td>Connector Name</td><td>TWEETER RH</td></tr> <tr><td>Connector Type</td><td>TK02MRF-P</td></tr> </table>  	Connector No.	D32	Connector Name	TWEETER RH	Connector Type	TK02MRF-P	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D32																							
Connector Name	TWEETER RH																							
Connector Type	TK02MRF-P																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D41</td></tr> <tr><td>Connector Name</td><td>DOOR WOOFER RH</td></tr> <tr><td>Connector Type</td><td>NS02FW-CS</td></tr> </table>  	Connector No.	D41	Connector Name	DOOR WOOFER RH	Connector Type	NS02FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>G</td><td>R</td></tr> </table>	Terminal No.	1	2	Color of Wire	G	R	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D41																							
Connector Name	DOOR WOOFER RH																							
Connector Type	NS02FW-CS																							
Terminal No.	1	2																						
Color of Wire	G	R																						
Signal Name [Specification]																								
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Connector No.	D46																							
Connector Name	DOOR SQUAWKER RH																							
Connector Type	TK02FBR																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>E5</td></tr> <tr><td>Connector Name</td><td>POWER DISTRIBUTION MODULE</td></tr> <tr><td>Connector Type</td><td>TH20FW-CS12-M4-1V</td></tr> </table>  	Connector No.	E5	Connector Name	POWER DISTRIBUTION MODULE	Connector Type	TH20FW-CS12-M4-1V	<table border="1"> <tr><td>Terminal No.</td><td>25</td></tr> <tr><td>Color of Wire</td><td>G</td></tr> </table>	Terminal No.	25	Color of Wire	G	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]											
Connector No.	E5																							
Connector Name	POWER DISTRIBUTION MODULE																							
Connector Type	TH20FW-CS12-M4-1V																							
Terminal No.	25																							
Color of Wire	G																							
Signal Name [Specification]																								

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

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**BOSE AUDIO WITHOUT NAVIGATION SYSTEM**

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-MS10-TM4



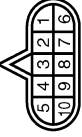
Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	
68	W	
88	O	

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH (WITH A/T)
Connector Type	TB01FW




Terminal No.	Color of Wire	Signal Name [Specification]
1	O	

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY




Terminal No.	Color of Wire	Signal Name [Specification]
7	R	

Connector No.	F55
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02FEB



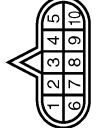
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	O	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-MS10




Terminal No.	Color of Wire	Signal Name [Specification]
30	R	
31	R	
41	O	

Connector No.	F157
Connector Name	TOM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG




Terminal No.	Color of Wire	Signal Name [Specification]
7	L	REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS30FPW-M2



Terminal No.	Color of Wire	Signal Name [Specification]
ZA	G	
5A	L	

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FPV-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1B	V	- [Without NAV]

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[BOSE AUDIO WITHOUT NAVIGATION]

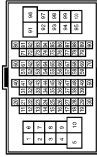
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



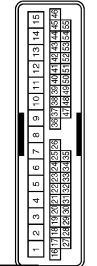
Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
46	SB	- [Without NAVI]
49	R	- [With BOSE system]
50	G	- [With BOSE system]
57	O	-
61	O	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



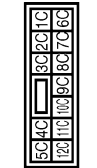
Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
69	G	-
89	O	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MM-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	W	-
8	B	-
11	W	-
12	L	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	R	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MM



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

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A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# DISPLAY UNIT

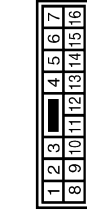
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[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

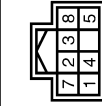
15	G	-
16	W	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	SB	-
5	Y	-
6	LG	-
7	B	-
11	L	-
12	P	-
13	V	-
14	R	- [Without NAV]

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



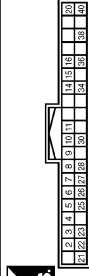
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M29
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40PW-NH



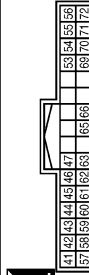
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

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# DISPLAY UNIT

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[BOSE AUDIO WITHOUT NAVIGATION]

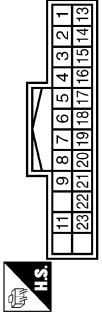
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M68
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS2FL-M2-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	O	ACC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
11	P	COMM (CONT->DISP)
13	BR	INVERTER GND

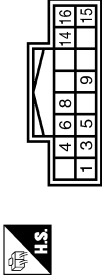
Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-GS2



Terminal No.	Color of Wire	Signal Name [Specification]
6	P	STRG SW A
7	V	ACC
8	B	GND
9	L	ILLUMINATION
15	B	STRG SW GND
16	L	STRG SW B
17	B	GND
18	Y	BATTERY
20	B	GND

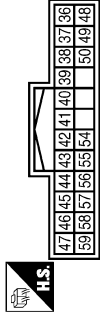
14	LG	SIGNAL GND
15	SR	COMPOSITE IMAGE SIGNAL
16	BR	COMPOSITE SYNC
17	G	RGB (R-RED) SIGNAL
18	P	RGB (B-BLUE) SIGNAL
19	W	RGB SYNC
20	G	VP
21	SHIELD	SHIELD
22	L	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



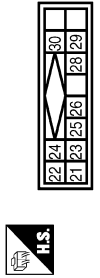
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	ACC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (BLUE) SIGNAL
39	L	RGB (GREEN) SIGNAL
40	G	RGB (R-RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (YS) SIGNAL
44	L	COMM (DISP->CONT)
45	R	HP
46	LG	SIGNAL GND

Connector No.	M82
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	A12FW



Terminal No.	Color of Wire	Signal Name [Specification]
21	W	SOUND SIGNAL LH (-)
22	B	SOUND SIGNAL LH (+)
23	R	SOUND SIGNAL RH (-)
24	G	SOUND SIGNAL RH (+)
25	SHIELD	SHIELD
26	SHIELD	SHIELD
28	P	REQUEST (SAT->CONT)
29	G	COMM (SAT->CONT)
30	L	COMM (CONT->SAT)

47	O	SIGNAL VCC
48	BR	COMPOSITE SYNC
49	Y	SHIELD
50	SHIELD	SHIELD
55	SHIELD	SHIELD
56	P	COMM (CONT->DISP)
57	G	VP
58	BR	INVERTER GND
59	Y	INVERTER VCC

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AV

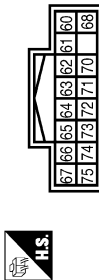
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< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

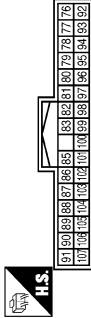
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	GR	CAMERA CONNECTION RECOGNITION
73	B	SHIELD
74	R	AUX IMAGE GND

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
79	P	TEL VOICE SIGNAL (-)
80	L	TEL VOICE SIGNAL (+)
81	SHIELD	SHIELD
82	G	iPod SOUND SIGNAL RH (-)
83	B	iPod SOUND SIGNAL RH (+)
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	G	AV COMM (H) [With BOSE system]
89	R	AV COMM (L) [With BOSE system]
90	SB	AV COMM (H) [With BOSE system]

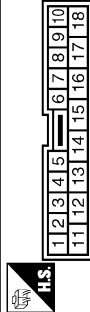
Terminal No.	Color of Wire	Signal Name [Specification]
91	Y	AV COMM (L) [With BOSE system]
95	R	AUX SOUND SIGNAL RH (+)
96	W	AUX SOUND SIGNAL LH (+)
97	B	AUX SOUND SIGNAL LH (-)
98	W	iPod SOUND SIGNAL LH (-)
99	R	iPod SOUND SIGNAL LH (+)
100	SHIELD	SHIELD
101	BR	SW GND
103	SB	DISK EJECT SIGNAL
104	G	IGNITION
105	O	REVERSE
106	SB	PARKING BRAKE
107	GR	VEHICLE SPEED (3-PULSE)

Connector No.	M86
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH12FW-NH



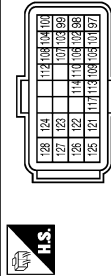
Terminal No.	Color of Wire	Signal Name [Specification]
109	R	SOUND SIGNAL RH (+)
111	B	SHIELD
113	P	SOUND SIGNAL LH (-)
115	G	SOUND SIGNAL RH (-)
119	L	SOUND SIGNAL LH (-)

Connector No.	M106
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	- [Without NAVI]
2	W	- [Without NAVI]
3	R	- [Without NAVI]

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-R26-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod ADAPTER->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTIFY
12	W	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
14	G	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	R	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)

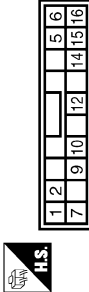
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< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

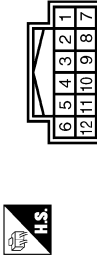
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M112
Connector Name	iPod SIDE (WITH A-7)
Connector Type	IP18FY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M114
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



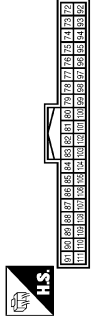
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	O	-
4	SHIELD	-
5	W	-
6	B	-
7	R	-
8	BR	-
9	W	-
10	W	-
11	SHIELD	-

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH6MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
40	Y	-
41	G	-
42	LG	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	P	-
48	I	-
49	SHIELD	-
50	V	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



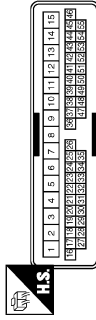
Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TH38MW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	SB	-
12	BR	-

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# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

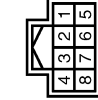
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)
Connector Type	A08FW



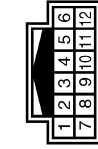
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M155
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	B	
6	SHIELD	
7	G	
8	R	

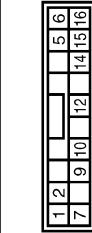
Connector No.	M181
Connector Name	WIRE TO WIRE
Connector Type	TH12MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	G	
3	O	
4	SHIELD	
5	W	
6	B	
7	R	
8	BR	
9	W	
10	L	
11	SHIELD	

12	P
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Connector No.	M182
Connector Name	iPod SIDE (WITH M/T)
Connector Type	IP18FGY



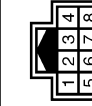
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	L	iPod CONNECTION RECOGNITION GND
10	BR	CHARGE POWER
12	W	SHIELD
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTITY

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



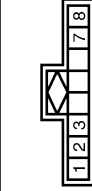
Terminal No.	Color of Wire	Signal Name [Specification]
14	-	
15	-	
17	-	

Connector No.	M361
Connector Name	WIRE TO WIRE
Connector Type	TH08MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	SHIELD	
6	SHIELD	
7	G	
8	R	

Connector No.	M362
Connector Name	AUXILIARY INPUT JACKS (WITH M/T)
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

















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# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>M370</td></tr> <tr><td>Connector Name</td><td>AV CONTROL UNIT (WITHOUT NAVI)</td></tr> <tr><td>Connector Type</td><td>GT13SH-2 /S-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>34</td></tr> <tr><td>Color of Wire</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>AM-FM MAIN</td></tr> <tr><td>Terminal No.</td><td>35</td></tr> <tr><td>Color of Wire</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>ANTENNA AMP_ON SIGNAL</td></tr> </table>	Connector No.	M370	Connector Name	AV CONTROL UNIT (WITHOUT NAVI)	Connector Type	GT13SH-2 /S-HU	Terminal No.	34	Color of Wire	--	Signal Name [Specification]	AM-FM MAIN	Terminal No.	35	Color of Wire	--	Signal Name [Specification]	ANTENNA AMP_ON SIGNAL	<table border="1"> <tr><td>Connector No.</td><td>M375</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SSH-1 /IPP-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td></tr> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td></tr> </table>	Connector No.	M375	Connector Name	WIRE TO WIRE	Connector Type	GT13SSH-1 /IPP-HU	Terminal No.	1	Color of Wire	--	Signal Name [Specification]	--	Terminal No.	2	Color of Wire	--	Signal Name [Specification]	--	<table border="1"> <tr><td>Connector No.</td><td>M376</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SS-1 /S-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td></tr> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td></tr> </table>	Connector No.	M376	Connector Name	WIRE TO WIRE	Connector Type	GT13SS-1 /S-HU	Terminal No.	1	Color of Wire	--	Signal Name [Specification]	--	Terminal No.	2	Color of Wire	--	Signal Name [Specification]	--	<table border="1"> <tr><td>Connector No.</td><td>M378</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SSN-1 /IPP-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td></tr> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td></tr> </table>	Connector No.	M378	Connector Name	WIRE TO WIRE	Connector Type	GT13SSN-1 /IPP-HU	Terminal No.	1	Color of Wire	--	Signal Name [Specification]	--	Terminal No.	2	Color of Wire	--	Signal Name [Specification]	--												
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Connector No.	M381																																																																																						
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Signal Name [Specification]	MICROPHONE GND																																																																																						
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Color of Wire	G																																																																																						
Signal Name [Specification]	MICROPHONE VCC [Without NAVI]																																																																																						

JCNWA2433GB

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# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

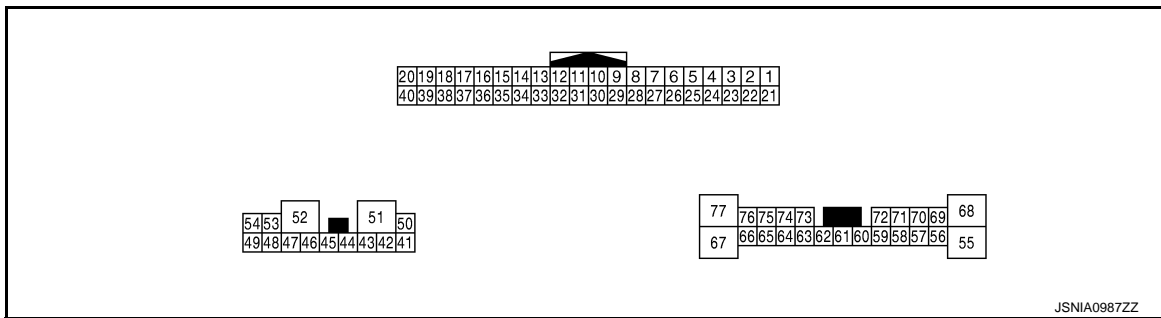
[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AMP.

### Reference Value

INFOID:000000004929171

### TERMINAL LAYOUT



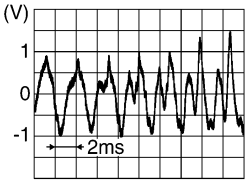
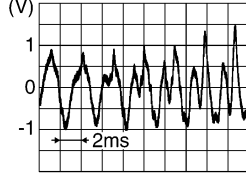
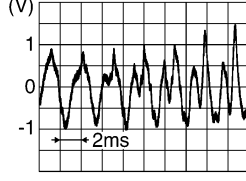
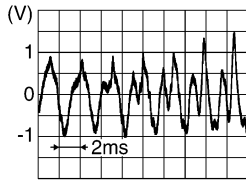
### PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
14 (R)	—	AV communication signal (L)	Input/ Output	—	—	—
15 (P)	—	AV communication signal (L)	Input/ Output	—	—	—
16 (W)	Ground	ACC power supply	Input	Ignition switch ACC	—	12.0 V
29 (P)	9 (L)	Sound signal LH	Input	Ignition switch ON	Sound output	<p style="text-align: right;">SKIB3609E</p>
30 (R)	10 (G)	Sound signal RH	Input	Ignition switch ON	Sound output	<p style="text-align: right;">SKIB3609E</p>
31 (Y)	11 (G)	Microphone signal (for AudioPilot®)	Input	Ignition switch ON	When inputting noise.	<p style="text-align: right;">(reference value) PKIA2104E</p>

# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
32 (V)	12 (SB)	Voice guidance signal	Input	Ignition switch ON	When inputting voice guid- ance.	 <small>SKIB3609E</small>
33	—	Shield	—	—	—	—
34 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
35 (L)	—	AV communication signal (H)	Input/ Output	—	—	—
40 (V)	Ground	Roof status signal (audio)	Input	Ignition switch ON	Retractable hard top is fully closed.	13.0 V
					Other than above.	0 V
41 (B)	42 (W)	Sound signal door woofer LH	Output	Ignition switch ON	Sound output	 <small>SKIB3609E</small>
45 (G)	46 (R)	Sound signal door woofer RH	Output	Ignition switch ON	Sound output	 <small>SKIB3609E</small>
47 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
50 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
51 (GR)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
52 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
54 (L)	49 (P)	Sound signal rear woofer LH	Output	Ignition switch ON	Sound output	 <small>SKIB3609E</small>

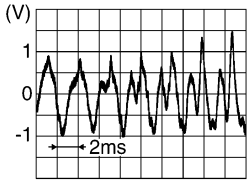
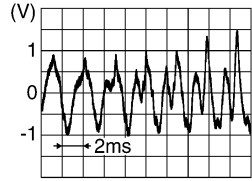
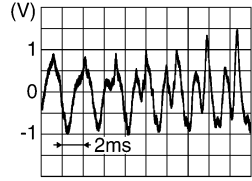
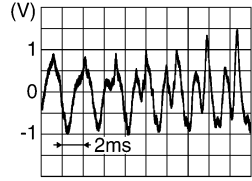
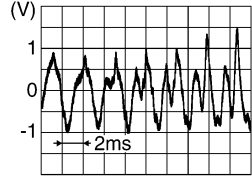
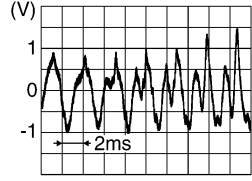
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# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

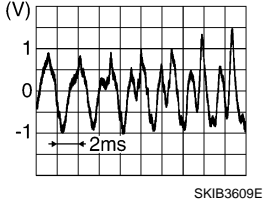
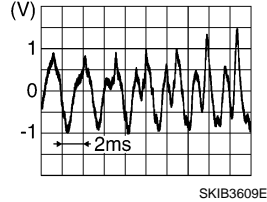
Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
56 (W)	69 (B)	Sound signal front RH headrest LH	Output	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
57 (O)	58 (P)	Sound signal center speak- er	Output	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
59 (P)	72 (W)	Sound signal front LH	Input	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
62 (V)	73 (LG)	Sound signal front RH	Input	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
63 (G)	74 (Y)	Sound signal front LH headrest LH	Input	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
64 (W)	75 (B)	Sound signal front LH headrest RH	Input	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>



# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
68 (LG)	55 (O)	Sound signal rear woofer RH	Output	Ignition switch ON	Sound output	
71 (Y)	70 (G)	Sound signal front RH headrest RH	Input	Ignition switch ON	Sound output	

Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM -

INFOID:000000004928944

**NOTE:**

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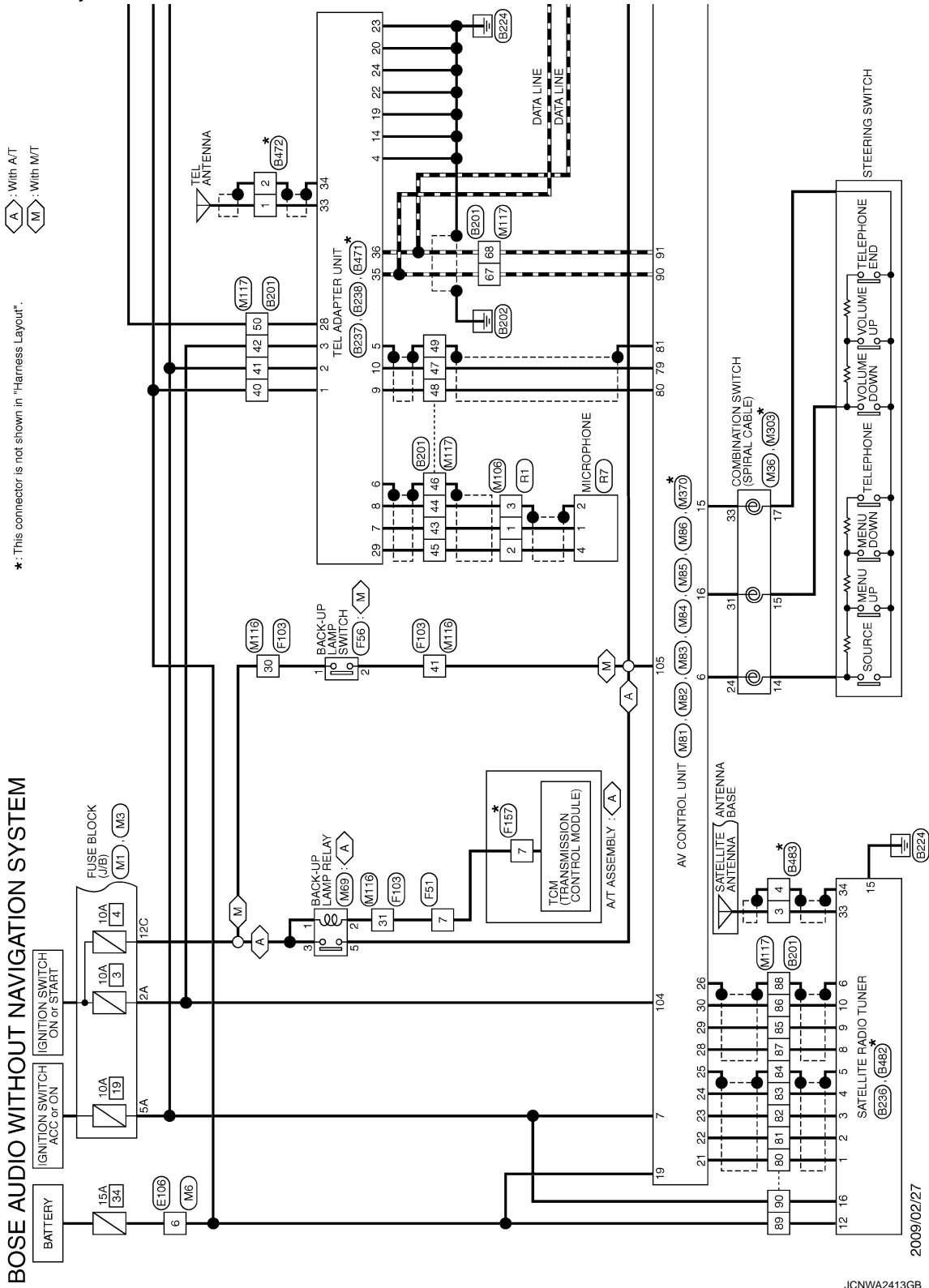
AV

# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

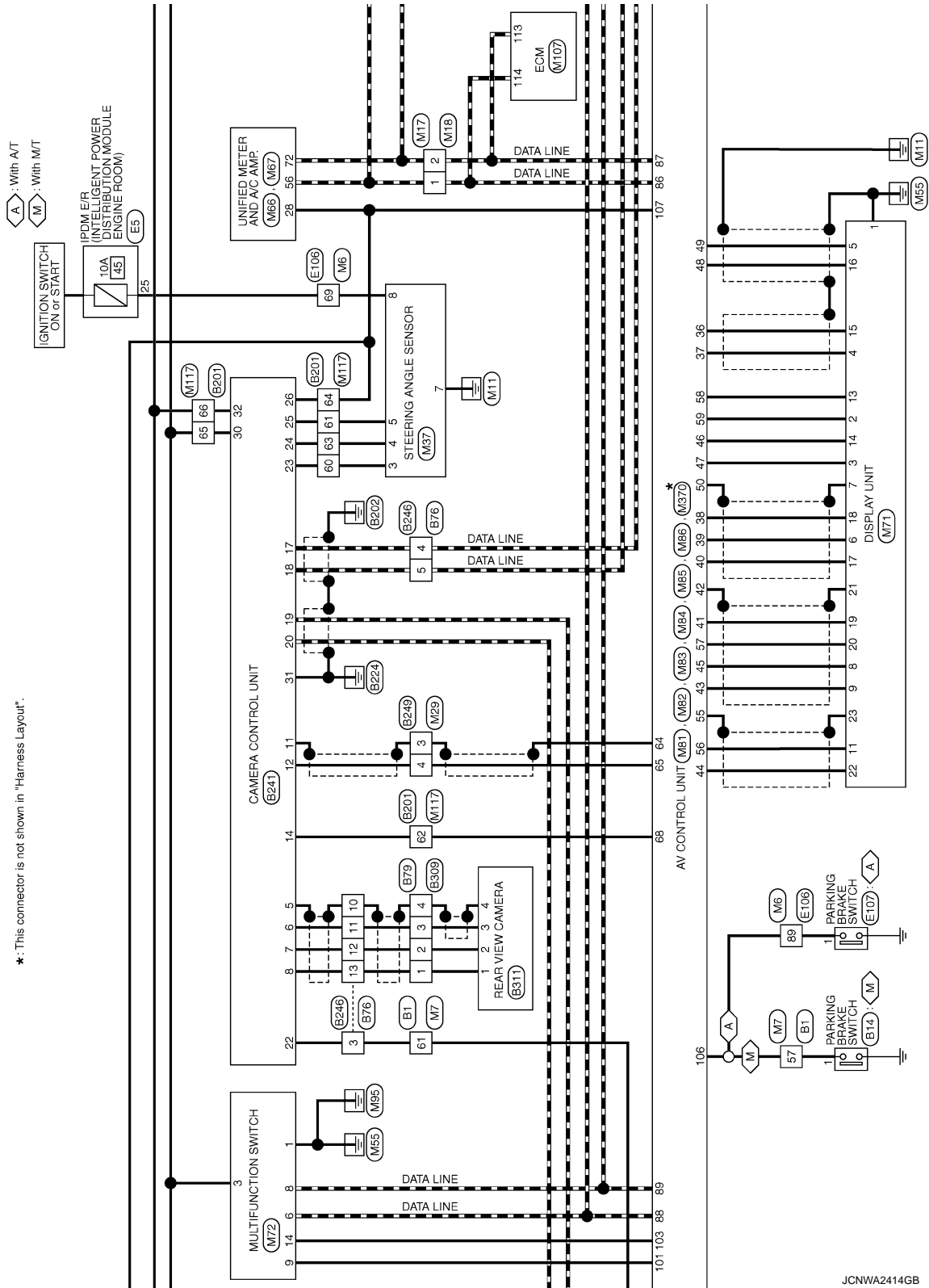
The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.



# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

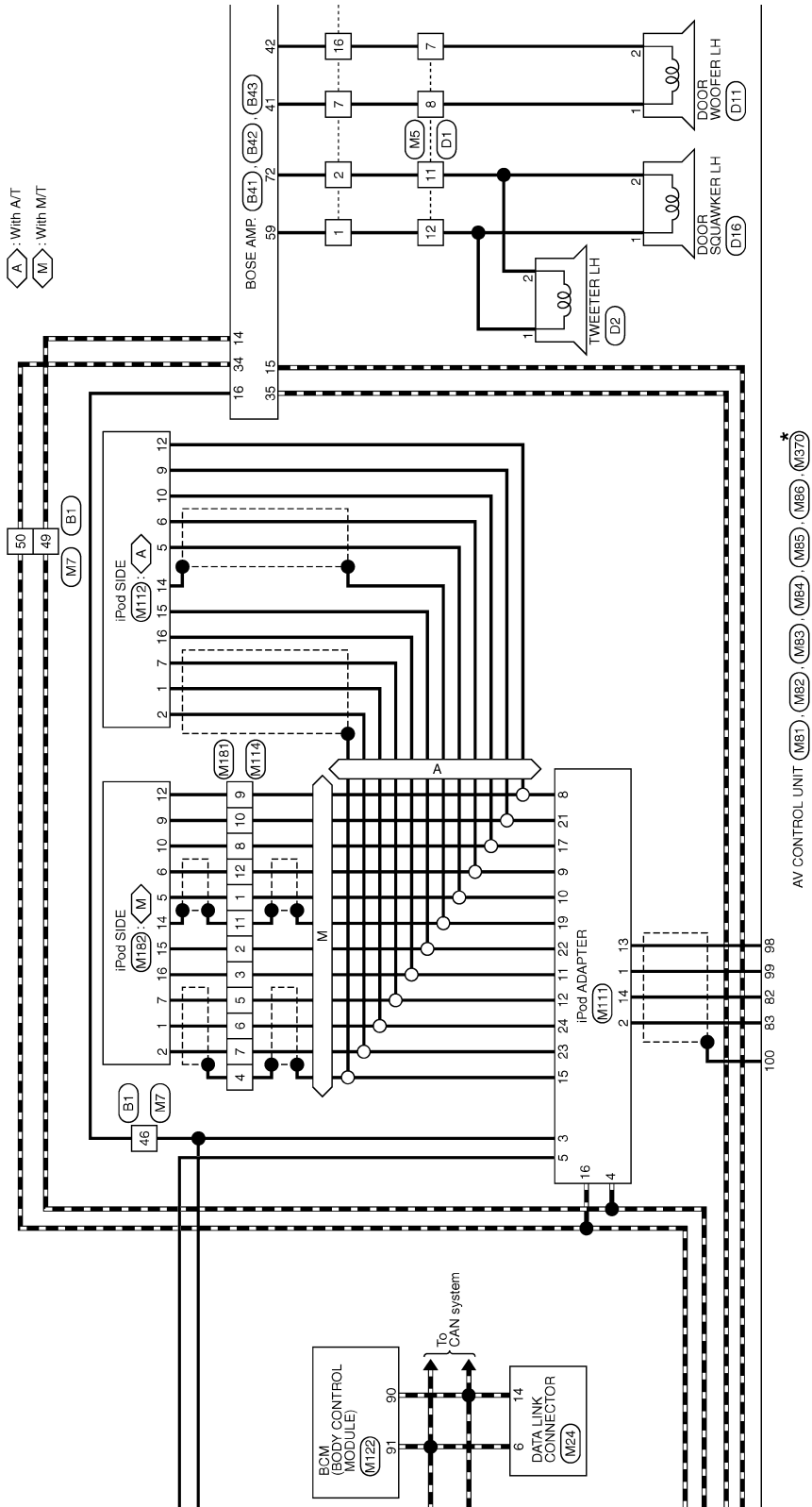


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# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]



\*: This connector is not shown in "Harness Layout".

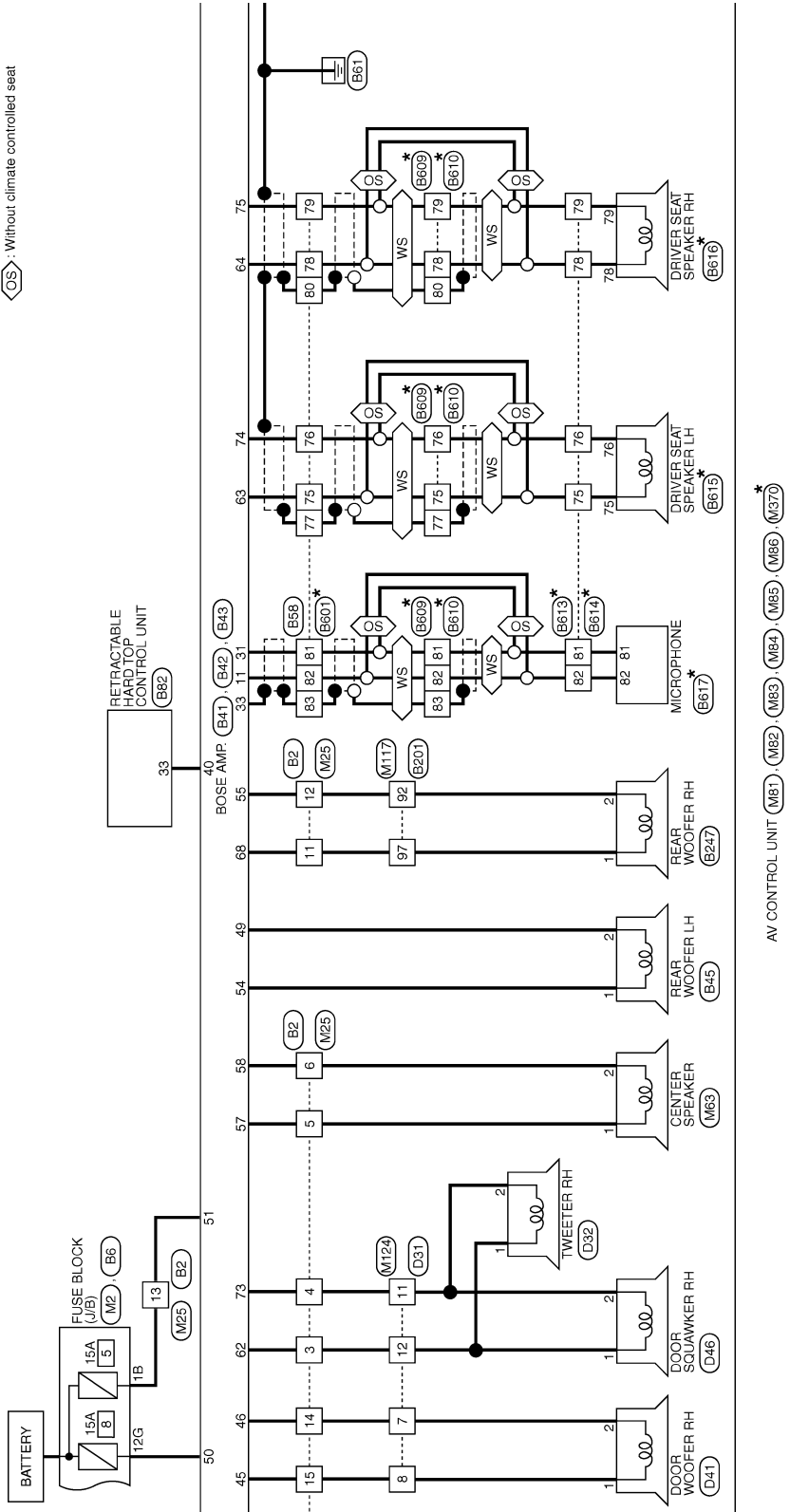
JCNWA2415GB

# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

WS: With climate controlled seat  
 OS: Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

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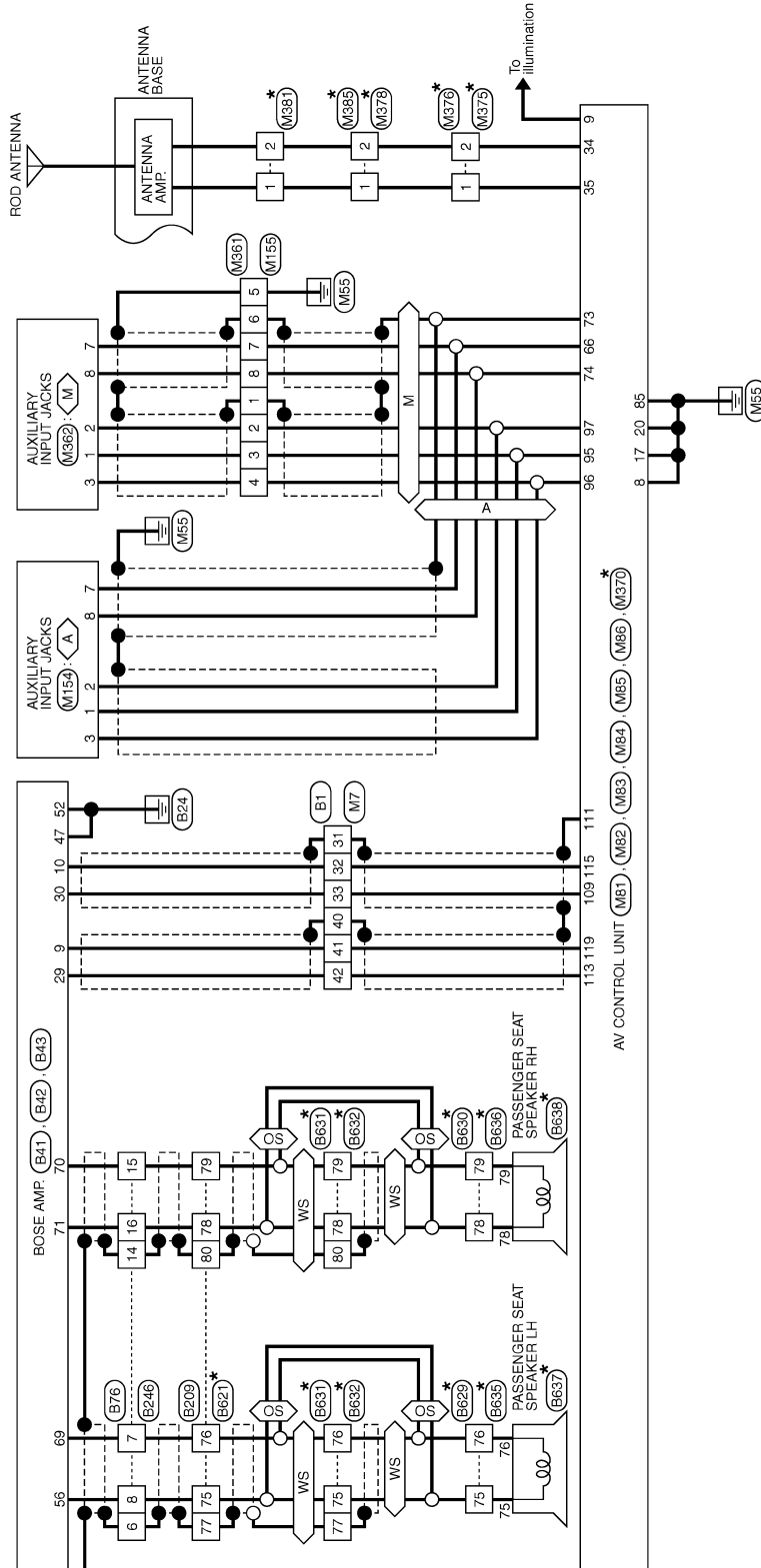
JCNWA2416GB

# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

- : With A/T
- : With M/T
- : With climate controlled seat
- : Without climate controlled seat

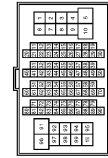


\*: This connector is not shown in "Harness Layout".

JCNWA2417GB

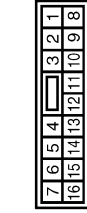
BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH00FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
46	W	-
49	R	- [With BOSE system]
50	G	- [With BOSE system]
57	V	-
61	O	-

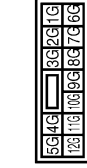
Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-

15	G
16	W

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12G	Y	-

Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	P01FB-A



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

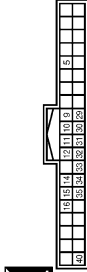
35	L
40	V

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SGA12FBR-SJA2



Terminal No.	Color of Wire	Signal Name [Specification]
41	B	SOUND SIGNAL DOOR WOOFER LH (+)
42	W	SOUND SIGNAL DOOR WOOFER LH (-)
45	G	SOUND SIGNAL DOOR WOOFER RH (+)
46	R	SOUND SIGNAL DOOR WOOFER RH (-)
47	B	GND
49	P	SOUND SIGNAL WOOFER REAR LH (-)
50	Y	BATTERY
51	GR	BATTERY
52	B	GND
54	L	SOUND SIGNAL WOOFER REAR LH (+)

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
9	L	SOUND SIGNAL LH (-)
10	G	SOUND SIGNAL RH (-)
11	G	MICROPHONE SIGNAL (-)
14	R	AV COMM (L)
15	P	AV COMM (L)
16	W	ACC
29	P	SOUND SIGNAL LH (+)
30	R	SOUND SIGNAL RH (+)
31	Y	MICROPHONE SIGNAL (+)
33	SHIELD	SHIELD
34	G	AV COMM (H)

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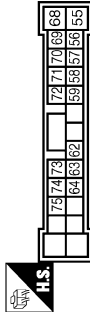
# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

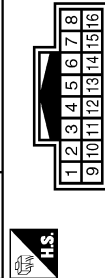
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B43
Connector Name	BOSE AMP.
Connector Type	SCALIFERR-SG44



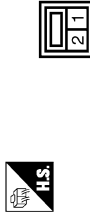
Terminal No.	Color of Wire	Signal Name [Specification]
55	O	SOUND SIGNAL FR RH HEADREST RH (-)
56	W	SOUND SIGNAL FR RH HEADREST LH (+)
57	O	SOUND SIGNAL CENTER (+)
58	P	SOUND SIGNAL FRONT LH (+)
59	L	SOUND SIGNAL FRONT RH (+)
60	V	SOUND SIGNAL FR LH HEADREST LH (+)
61	G	SOUND SIGNAL FR LH HEADREST RH (+)
62	W	SOUND SIGNAL FR LH HEADREST LH (-)
63	G	SOUND SIGNAL FR LH HEADREST RH (-)
64	W	SOUND SIGNAL FR LH HEADREST LH (+)
65	LG	SOUND SIGNAL WOOFER REAR RH (+)
66	B	SOUND SIGNAL FR RH HEADREST LH (-)
67	B	SOUND SIGNAL FR RH HEADREST LH (+)
68	B	SOUND SIGNAL FR RH HEADREST LH (-)
69	B	SOUND SIGNAL FR RH HEADREST LH (+)
70	G	SOUND SIGNAL FR RH HEADREST RH (-)
71	Y	SOUND SIGNAL FR RH HEADREST RH (+)
72	W	SOUND SIGNAL FRONT LH (-)
73	LG	SOUND SIGNAL FRONT RH (-)
74	Y	SOUND SIGNAL FR LH HEADREST LH (-)
75	B	SOUND SIGNAL FR LH HEADREST RH (-)

Connector No.	B76
Connector Name	WIRE TO WIRE
Connector Type	TH1(BMW-NH)



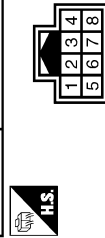
Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	B	-
14	SHIELD	-

Connector No.	B45
Connector Name	REAR WOOFER LH
Connector Type	NS302FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH03BMF-NH



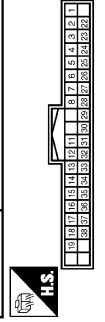
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	SHIELD	-

Connector No.	B88
Connector Name	WIRE TO WIRE
Connector Type	NS10FERR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	G	-
76	Y	-
77	SHIELD	-
78	W	-
79	B	-
80	SHIELD	-
81	Y	-
82	G	-
83	SHIELD	-

Connector No.	B82
Connector Name	RETRACTABLE HARD TOP CONTROL UNIT
Connector Type	TH40PTV-NH



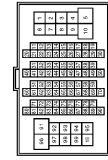
Terminal No.	Color of Wire	Signal Name [Specification]
33	V	ROOF STATUS SIGNAL (AUDIO)

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BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B2201
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
40	GR	-
41	LG	-
42	O	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	G	-
48	Y	-
49	SHIELD	-
50	P	-

Connector No.	B2206
Connector Name	SATELLITE RADIO TUNER
Connector Type	A16FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	Y	REQUEST (SAT->CONT)
9	O	COMM (SAT->CONT)
10	BR	COMM (CONT->SAT)
12	SB	BATTERY
15	B	GND

Connector No.	B2209
Connector Name	WIRE TO WIRE
Connector Type	NS16FER-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	W	-
76	B	-
77	SHIELD	-
78	Y	-
79	G	-
80	SHIELD	-

Connector No.	B237
Connector Name	TEL ADAPTER UNIT
Connector Type	TH82FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BATTERY
2	LG	ACC
3	O	IGNITION
4	B	GND
5	SHIELD	SHIELD
6	SHIELD	SHIELD
7	B	MICROPHONE SIGNAL
8	BR	MICROPHONE GND
9	Y	TEL VOICE SIGNAL (+)
10	G	TEL VOICE SIGNAL (-)
14	B	GND

19	B	GND
20	B	CONTROL SIGNAL
22	B	CONTROL SIGNAL
23	B	CONTROL SIGNAL
24	B	CONTROL SIGNAL
28	P	VEHICLE SPEED (8-PULSE)
29	W	MICROPHONE VCC

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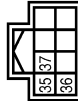
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[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B238
Connector Name	TEL ADAPTER UNIT
Connector Type	TH8BFW-NH



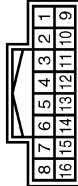
Terminal No.	Color of Wire	Signal Name [Specification]
35	L	AV COMM (H)
36	P	AV COMM (L)

Connector No.	B241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH82FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

Connector No.	B246
Connector Name	WIRE TO WIRE
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	O	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (8-PULSE)
30	SB	ACC
31	B	GND
32	Y	BATTERY

Connector No.	B247
Connector Name	REAR WOOFER RH
Connector Type	NS82FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	B249
Connector Name	WIRE TO WIRE
Connector Type	TH84FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B309
Connector Name	WIRE TO WIRE
Connector Type	TH8BFW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	Y	-
4	SHIELD	-

Connector No.	B311
Connector Name	REAR VIEW CAMERA
Connector Type	TH8MNV-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	CAMERA ON SIGNAL
2	W	GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	B471
Connector Name	TEL ADAPTER UNIT
Connector Type	GT16C-1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
33	-	TEL ANTENNA
34	SHIELD	SHIELD

Connector No.	B472
Connector Name	TEL ANTENNA
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	SHIELD	-

Connector No.	B492
Connector Name	SATELLITE RADIO TUNER
Connector Type	PAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
33	-	SATELLITE ANTENNA
34	SHIELD	SHIELD

Connector No.	B483
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
3	-	-
4	SHIELD	-

Connector No.	B601
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B609
Connector Name	WIRE TO WIRE
Connector Type	NS16MY-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

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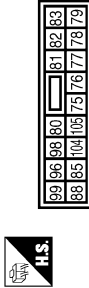
# BOSE AMP.

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[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B610
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B613
Connector Name	WIRE TO WIRE
Connector Type	A08MW



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
78	R	-
79	G	-
81	B	-
82	W	-

Connector No.	B614
Connector Name	WIRE TO WIRE
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-
78	-	-
79	-	-
81	-	-
82	-	-

Connector No.	B615
Connector Name	DRIVER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B616
Connector Name	DRIVER SEAT SPEAKER RH
Connector Type	TK02FW



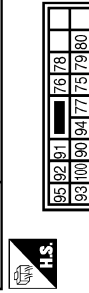
Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B617
Connector Name	MICROPHONE
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
81	-	-
82	-	-

Connector No.	B621
Connector Name	WIRE TO WIRE
Connector Type	NS16MBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B623
Connector Name	WIRE TO WIRE
Connector Type	TK02MGY





Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-

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BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B635
Connector Name	WIRE TO WIRE
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B632
Connector Name	WIRE TO WIRE
Connector Type	NSJ0FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B631
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B630
Connector Name	WIRE TO WIRE
Connector Type	TK02WW



Terminal No.	Color of Wire	Signal Name [Specification]
78	R	-
79	G	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40PW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	W	-
12	L	-

Connector No.	B638
Connector Name	PASSENGER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B637
Connector Name	PASSENGER SEAT SPEAKER LH
Connector Type	TK02FGY

Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B636
Connector Name	WIRE TO WIRE
Connector Type	TK02FW


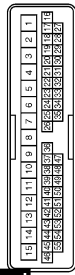
Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

JCNWA2424GB

A  
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BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FY-CS15

Terminal No.	Color of Wire	Signal Name [Specification]
7	R	
8	G	
11	W	
12	L	

Connector No.	D16
Connector Name	DOOR SQUAWKER LH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	W	

Connector No.	D11
Connector Name	DOOR WOOFER LH
Connector Type	NS02FW-CS




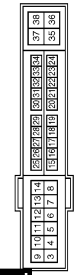

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	
2	R	

Connector No.	D2
Connector Name	TWEETER LH
Connector Type	TK02MBR-P



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	W	

Connector No.	E5
Connector Name	WIRE ILLUMINANT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH40FY-CS12-M4-1V



Terminal No.	Color of Wire	Signal Name [Specification]
25	G	

Connector No.	D46
Connector Name	DOOR SQUAWKER RH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	W	

Connector No.	D41
Connector Name	DOOR WOOFER RH
Connector Type	NS02FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	
2	R	

Connector No.	D32
Connector Name	TWEETER RH
Connector Type	TK02MBR-P


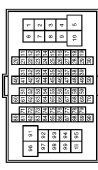



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	W	

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BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TK86FW-MS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
6B	W	-
8B	O	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH (WITH A/T)
Connector Type	TB01FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-D3Y



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-

Connector No.	F55
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02FB


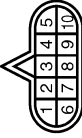
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	O	-

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK86FW-MS10



Terminal No.	Color of Wire	Signal Name [Specification]
30	R	-
31	R	-
41	O	-

Connector No.	F157
Connector Name	TOM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG



Terminal No.	Color of Wire	Signal Name [Specification]
7	L	REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2

Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	L	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS

Terminal No.	Color of Wire	Signal Name [Specification]
1B	V	- [Without NAV]

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# BOSE AMP.

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[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No. M3	FUSE BLOCK (J/B)	Connector No. M5	WIRE TO WIRE	Connector No. M6	WIRE TO WIRE	Connector No. M7	WIRE TO WIRE
Connector Name NS12FW-GS	NS12FW-GS	Connector Name TH40MW-C515	TH40MW-C515	Connector Name TH80MW-CS16-TM4	TH80MW-CS16-TM4	Connector Name TH80MW-CS16-TM4	TH80MW-CS16-TM4
Connector Type H.S.	NS12FW-GS	Connector Type H.S.	TH40MW-C515	Connector Type H.S.	TH80MW-CS16-TM4	Connector Type H.S.	TH80MW-CS16-TM4

Terminal No. 12C	Color of Wire R	Signal Name [Specification]	Terminal No. 7	Color of Wire W	Signal Name [Specification]	Terminal No. 31	Color of Wire SHIELD	Signal Name [Specification]
			8	B		32	G	
			11	W		33	R	
			12	L		40	SHIELD	
						41	L	
						42	P	
						46	SB	- [Without NAV]
						49	R	- [With BOSE system]
						50	G	- [With BOSE system]
						57	O	
						61	O	

Connector No. M17	WIRE TO WIRE	Connector No. M18	WIRE TO WIRE	Connector No. M24	DATA LINK CONNECTOR
Connector Name TK02FW	TK02FW	Connector Name TK02MW	TK02MW	Connector Name BD16FW	BD16FW
Connector Type H.S.	TK02FW	Connector Type H.S.	TK02MW	Connector Type H.S.	BD16FW

Terminal No. 1	Color of Wire L	Signal Name [Specification]	Terminal No. 6	Color of Wire L	Signal Name [Specification]
2	P		14	P	

Terminal No. 1	Color of Wire L	Signal Name [Specification]	Terminal No. 6	Color of Wire L	Signal Name [Specification]
2	P		14	P	

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BOSE AUDIO WITHOUT NAVIGATION SYSTEM

15	G	-
16	W	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	HS16MWF-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	SB	-
5	Y	-
6	LG	-
7	B	-
11	L	-
12	P	-
13	V	-
14	R	-
		[Without NAV]

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



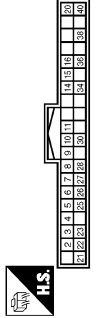
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M29
Connector Name	WIRE TO WIRE
Connector Type	TH04MM-NH



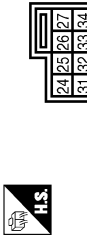
Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	M86
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



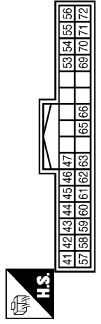
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M38
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M87
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

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P

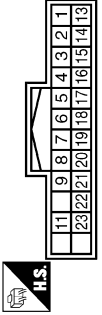
BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M89
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS22FL-M2-LC



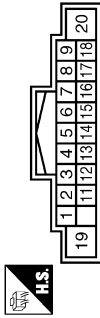
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	O	ACC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (G.GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
11	P	COMM (CONT->DISP)
13	BR	INVERTER GND

Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-CS2



Terminal No.	Color of Wire	Signal Name [Specification]
6	P	STRG SW A
7	V	ACC
8	B	GND
9	L	ILLUMINATION
15	B	STRG SW GND
16	L	STRG SW B
17	B	GND
18	Y	BATTERY
20	B	GND

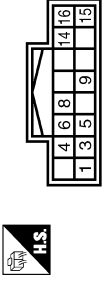
Connector No.	M82
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	A12FW



Terminal No.	Color of Wire	Signal Name [Specification]
21	W	SOUND SIGNAL LH (-)
22	B	SOUND SIGNAL LH (+)
23	R	SOUND SIGNAL RH (-)
24	G	SOUND SIGNAL RH (+)
25	SHIELD	SHIELD
26	SHIELD	SHIELD
28	P	REQUEST (SAT->CONT)
29	G	COMM (SAT->CONT)
30	L	COMM (CONT->SAT)

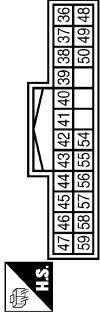
14	LG	SIGNAL GND
15	SR	COMPOSITE IMAGE SIGNAL
16	BR	COMPOSITE SYNC
17	G	RGB (R.RED) SIGNAL
18	P	RGB (B.BLUE) SIGNAL
19	W	RGB (G.GREEN) SIGNAL
20	G	RGB SYNC
21	SHIELD	VP
22	L	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	ACC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (B.BLUE) SIGNAL
39	L	RGB (G.GREEN) SIGNAL
40	G	RGB (R.RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (YS) SIGNAL
44	L	COMM (DISP->CONT)
45	R	HP
46	LG	SIGNAL GND

47	O	SIGNAL VCC
48	BR	COMPOSITE SYNC
49	L	SHIELD
50	SHIELD	SHIELD
55	P	COMM (CONT->DISP)
56	G	VP
57	G	INVERTER GND
58	BR	INVERTER VCC
59	Y	

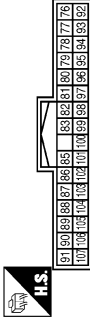
BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	GR	CAMERA CONNECTION RECOGNITION
73	B	SHIELD
74	R	AUX IMAGE GND

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH22FW-NH



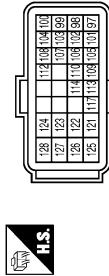
Terminal No.	Color of Wire	Signal Name [Specification]
79	P	TEL VOICE SIGNAL (-)
80	L	TEL VOICE SIGNAL (+)
81	SHIELD	SHIELD
82	G	iPod SOUND SIGNAL RH (-)
83	B	iPod SOUND SIGNAL RH (+)
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	G	AV COMM (H) [With BOSE system]
89	R	AV COMM (L) [With BOSE system]
90	SB	AV COMM (H) [With BOSE system]

Connector No.	M108
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	- [Without NAVI]
2	W	- [Without NAVI]
3	R	- [Without NAVI]

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-F228-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

Terminal No.	Color of Wire	Signal Name [Specification]
91	Y	AV COMM (L) [With BOSE system]
95	R	AUX SOUND SIGNAL RH (+)
96	W	AUX SOUND SIGNAL LH (+)
97	B	AUX SOUND SIGNAL GND
98	W	iPod SOUND SIGNAL LH (-)
99	R	iPod SOUND SIGNAL LH (+)
100	SHIELD	SHIELD
101	BR	SW GND
103	SB	DISK EJECT SIGNAL
104	G	IGNITION
105	O	REVERSE
106	SB	PARKING BRAKE
107	GR	VEHICLE SPEED (3-PULSE)

Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod ADAPTER->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTITY
12	W	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH12FW-NH

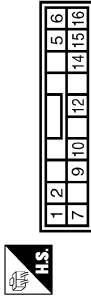


Terminal No.	Color of Wire	Signal Name [Specification]
109	R	SOUND SIGNAL RH (+)
111	B	SHIELD
113	P	SOUND SIGNAL LH (-)
115	G	SOUND SIGNAL RH (-)
119	L	SOUND SIGNAL LH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
14	G	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	R	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)

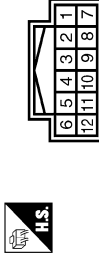
BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M112
Connector Name	IPOD SIDE (WITH A/T)
Connector Type	IP18EGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	IPOD SOUND SIGNAL LH (+)
2	R	IPOD SOUND SIGNAL GND
5	L	COMM (IPOD->IPOD ADAPTER)
6	P	COMM (IPOD ADAPTER->IPOD)
7	W	IPOD SOUND SIGNAL RH (+)
9	W	IPOD CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
18	O	ACCESSORY IDENTIFY

Connector No.	M114
Connector Name	WIRE TO WIRE
Connector Type	TH12RW-NH



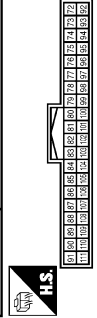
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	O	-
4	SHIELD	-
5	W	-
6	B	-
7	R	-
8	BR	-
9	W	-
10	W	-
11	SHIELD	-

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH180MW-CS16-TM4



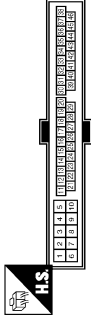
Terminal No.	Color of Wire	Signal Name [Specification]
40	Y	-
41	G	-
42	LG	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	P	-
48	L	-
49	SHIELD	-
50	V	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



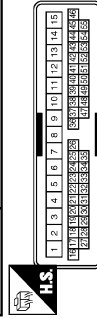
Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

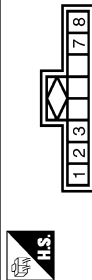
Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MP-CS15



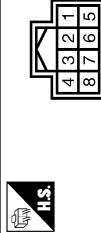
Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	SB	-
12	BR	-

BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M184
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)
Connector Type	AB8FW



Connector No.	M185
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Connector No.	M181
Connector Name	WIRE TO WIRE
Connector Type	TH12MMF-NH



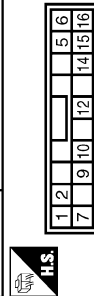
12	P	-
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Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R	-
4	W	-
5	B	-
6	SHIELD	-
7	G	-
8	R	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	O	-
4	SHIELD	-
5	W	-
6	B	-
7	R	-
8	BR	-
9	W	-
10	L	-
11	SHIELD	-

Connector No.	M182
Connector Name	iPod SIDE (WITH M/T)
Connector Type	IP18EGY



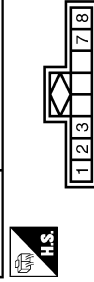
Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Connector No.	M361
Connector Name	WIRE TO WIRE
Connector Type	TH08MMF-NH



Connector No.	M362
Connector Name	AUXILIARY INPUT JACKS (WITH M/T)
Connector Type	AB8FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	L	iPod CONNECTION RECOGNITION GND
10	BR	CHARGE POWER
12	W	SHIELD
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Terminal No.	Color of Wire	Signal Name [Specification]
14	-	-
15	-	-
17	-	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R	-
4	W	-
5	SHIELD	-
6	SHIELD	-
7	G	-
8	R	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

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AV

# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M370
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	GT13SSH-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
34	-	AM-FM MAIN
35	-	ANTENNA AMP. ON SIGNAL

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SSH-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SSH-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SSH-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M381
Connector Name	ANTENNA BASE
Connector Type	GT13SSH-1/1PP-HU



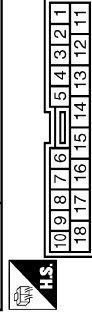
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP. ON SIGNAL
2	-	AM-FM MAIN

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SSH-1/1S-HU



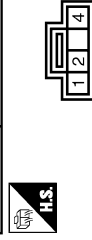
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TK10PW-N58



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	- [Without NAVI]
2	W	- [Without NAVI]
3	SHIELD	-

Connector No.	R7
Connector Name	MICROPHONE
Connector Type	TK6FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	MICROPHONE SIGNAL [Without NAVI]
2	SHIELD	MICROPHONE GND
4	G	MICROPHONE VCC [Without NAVI]

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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

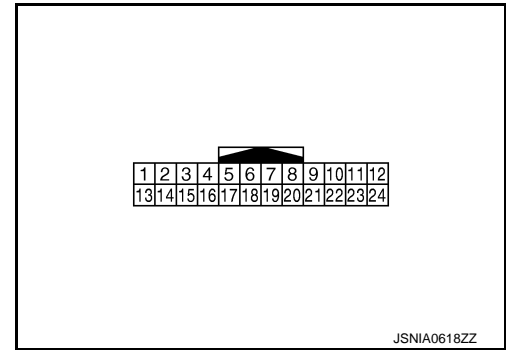
[BOSE AUDIO WITHOUT NAVIGATION]

## IPOD ADAPTER

Reference Value

INFOID:000000004929172

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
1 (R)	13 (W)	iPod sound signal LH	Output	Ignition switch ON	When iPod mode is select- ed.	<p style="text-align: right;">SKIB3609E</p>
2 (B)	14 (G)	iPod sound signal RH	Output	Ignition switch ON	When iPod mode is select- ed.	<p style="text-align: right;">SKIB3609E</p>
3 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
4 (R)	—	AV communication signal (L)	Input/ Output	—	—	—
5 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
8 (W)	Ground	iPod battery charge	Output	Ignition switch ON	Connected to iPod®.	12.0 V

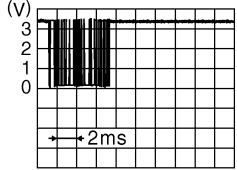
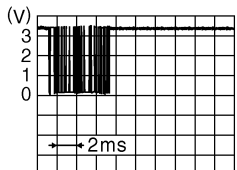
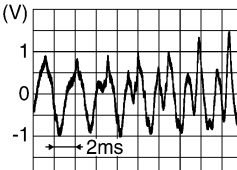
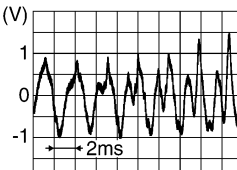
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AV

# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
9 (P)	Ground	Communication signal (iPod adapter→iPod®)	Output	Ignition switch ON	The wave pattern is displayed just after iPod connection.	<p><b>NOTE:</b> After the wave pattern display, the value continues Approx 3.3 V</p>  <p>JPNIA0462GB</p>
10 (L)	Ground	Communication signal (iPod®→iPod adapter)	Input	Ignition switch ON	Connected to iPod®.	 <p>JPNIA0462GB</p>
11 (O)	Ground	ACCESSORY IDENTIFY	—	Ignition switch ON	Connected to iPod®.	0 V
12 (W)	14 (G)	iPod sound signal RH	Input	Ignition switch ON	When iPod mode is selected.	 <p>SKIB3609E</p>
15	—	Shield	—	—	—	—
16 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
17 (BR)	Ground	Ground	—	Ignition switch ON	—	0 V
19	—	Shield	—	—	—	—
21 (W)	Ground	iPod connection recognition signal	Input	Ignition switch ON	Not connected to iPod®.	4.0 V
					Connected to iPod®.	0 V
22 (G)	Ground	ACCESSORY DETECT	—	Ignition switch ON	Connected to iPod®.	0 V
23 (R)	Ground	iPod sound signal ground	—	Ignition switch ON	—	0 V
24 (B)	13 (W)	iPod sound signal LH	Input	Ignition switch ON	When iPod mode is selected.	 <p>SKIB3609E</p>



# IPOD ADAPTER

[BOSE AUDIO WITHOUT NAVIGATION]

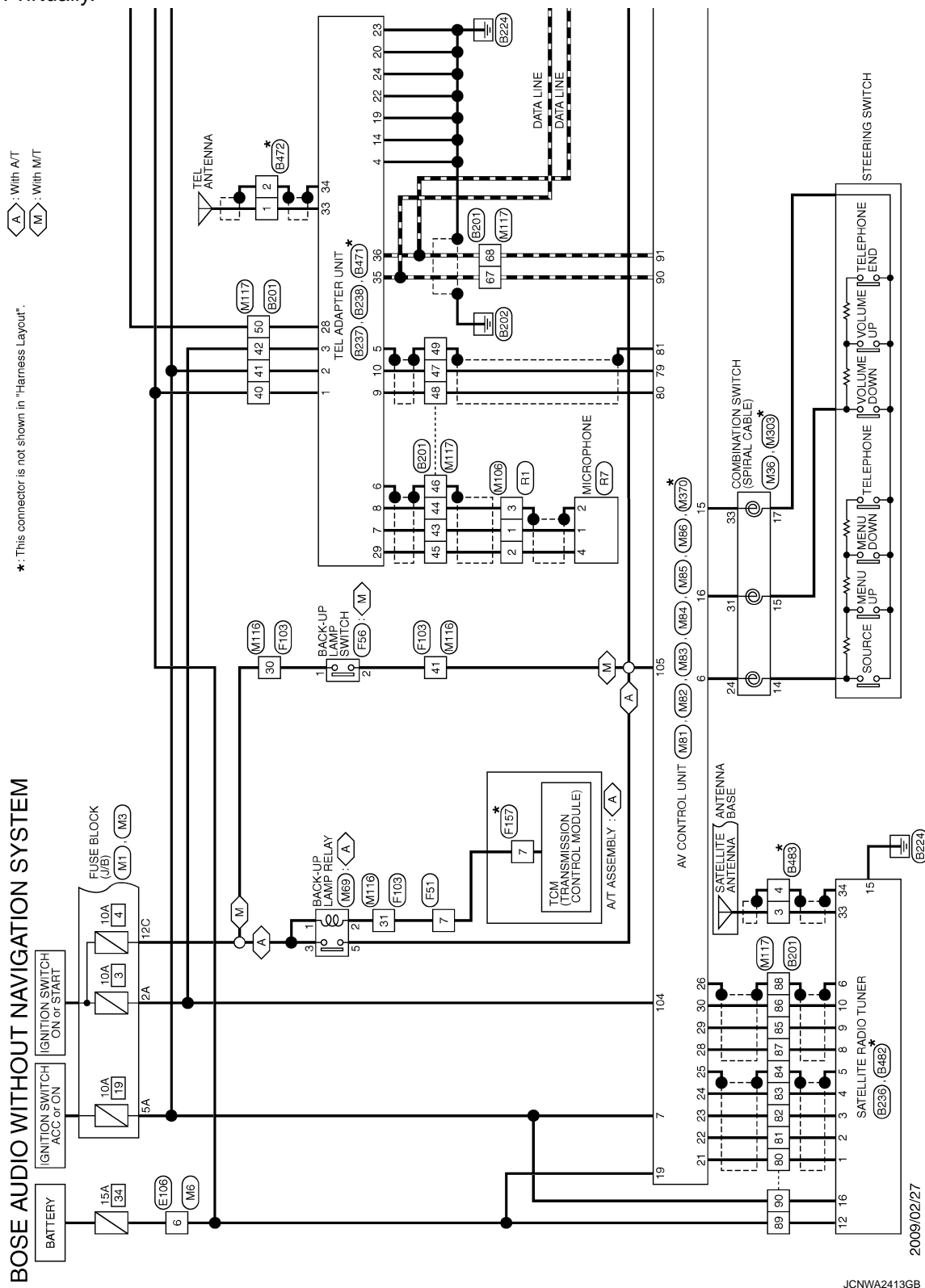
< ECU DIAGNOSIS INFORMATION >

## Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM -

INFOID:000000004928946

### NOTE:

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.



2009/02/27

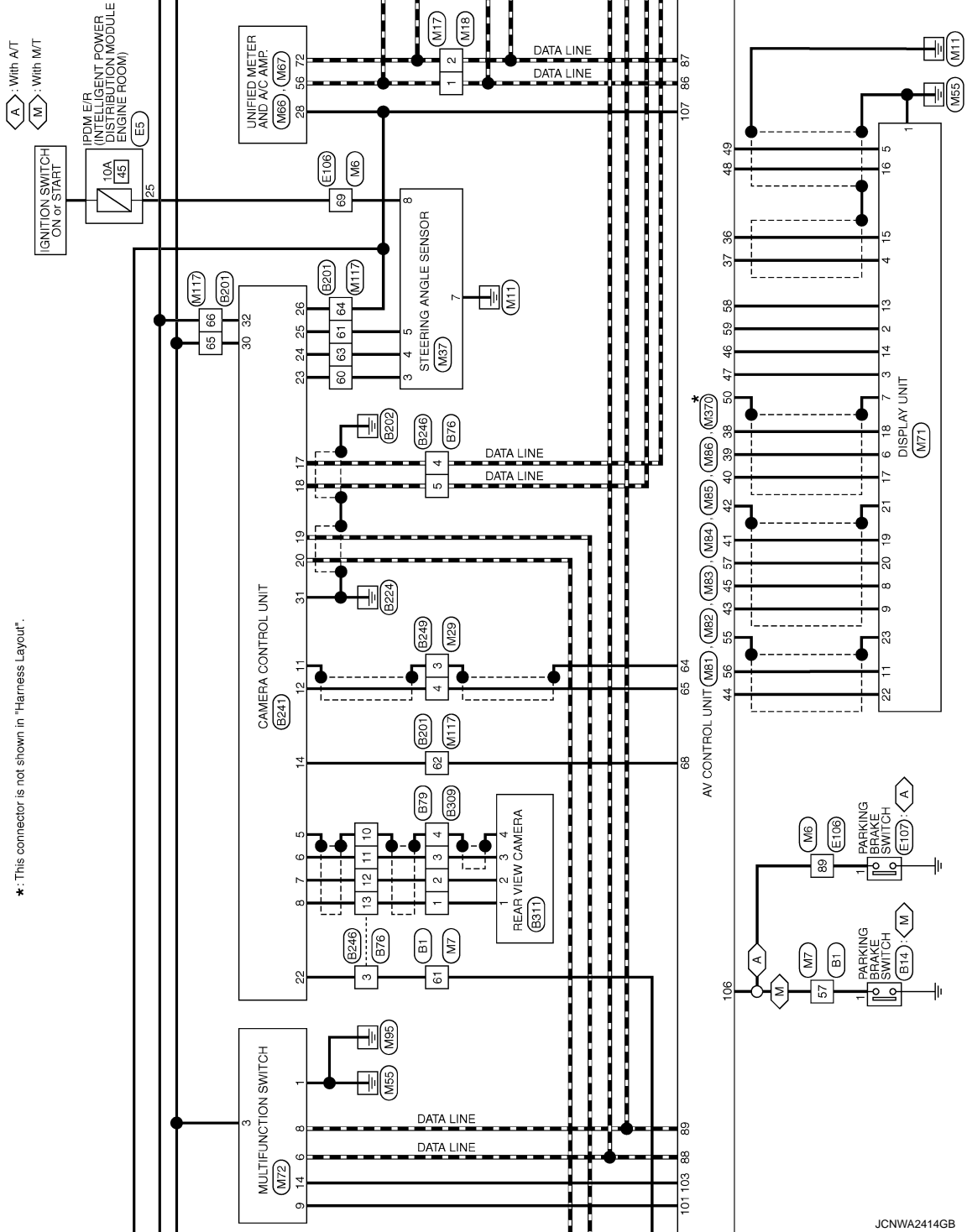
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AV

# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

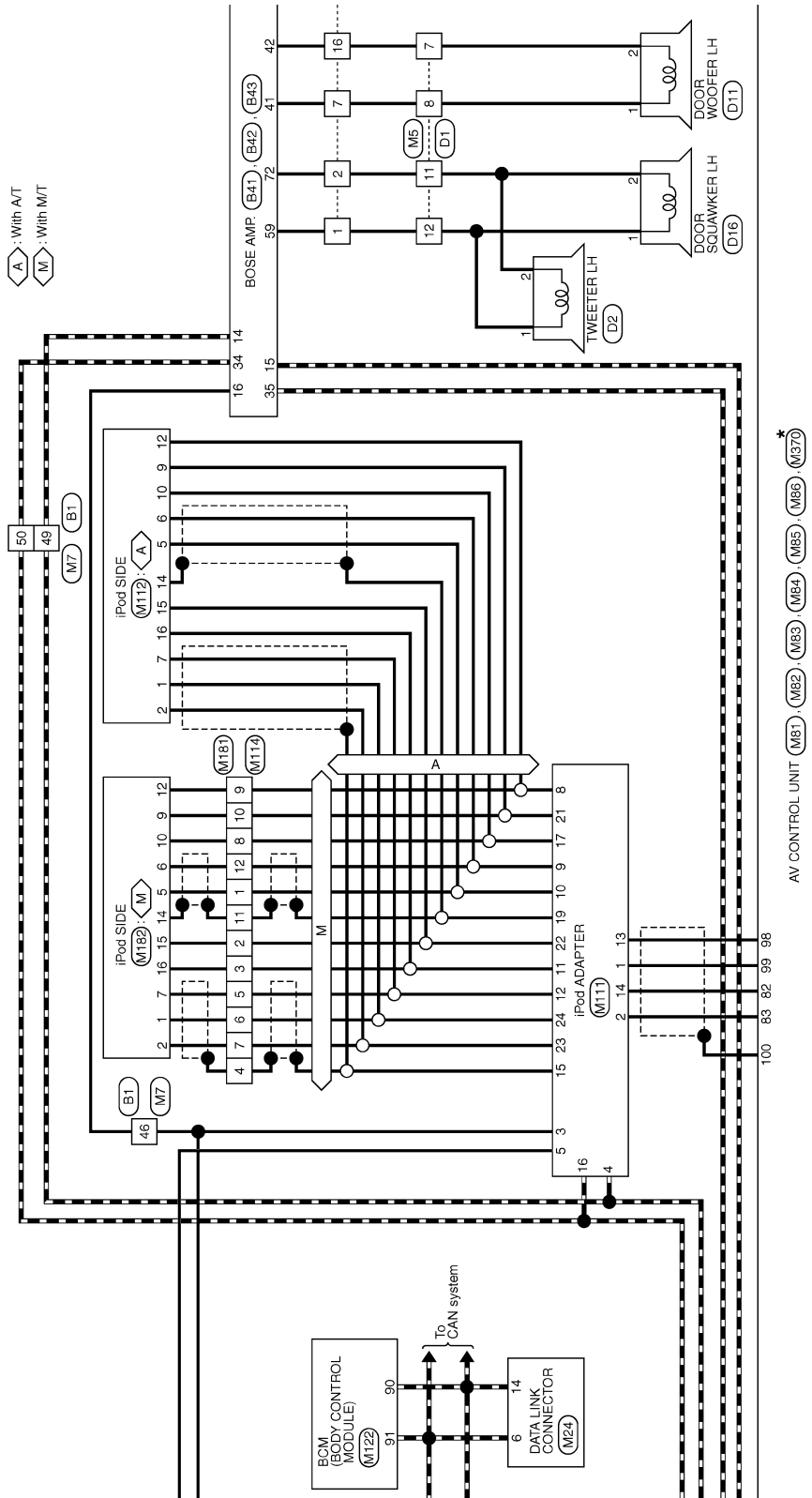


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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]



\*: This connector is not shown in "Harness Layout".

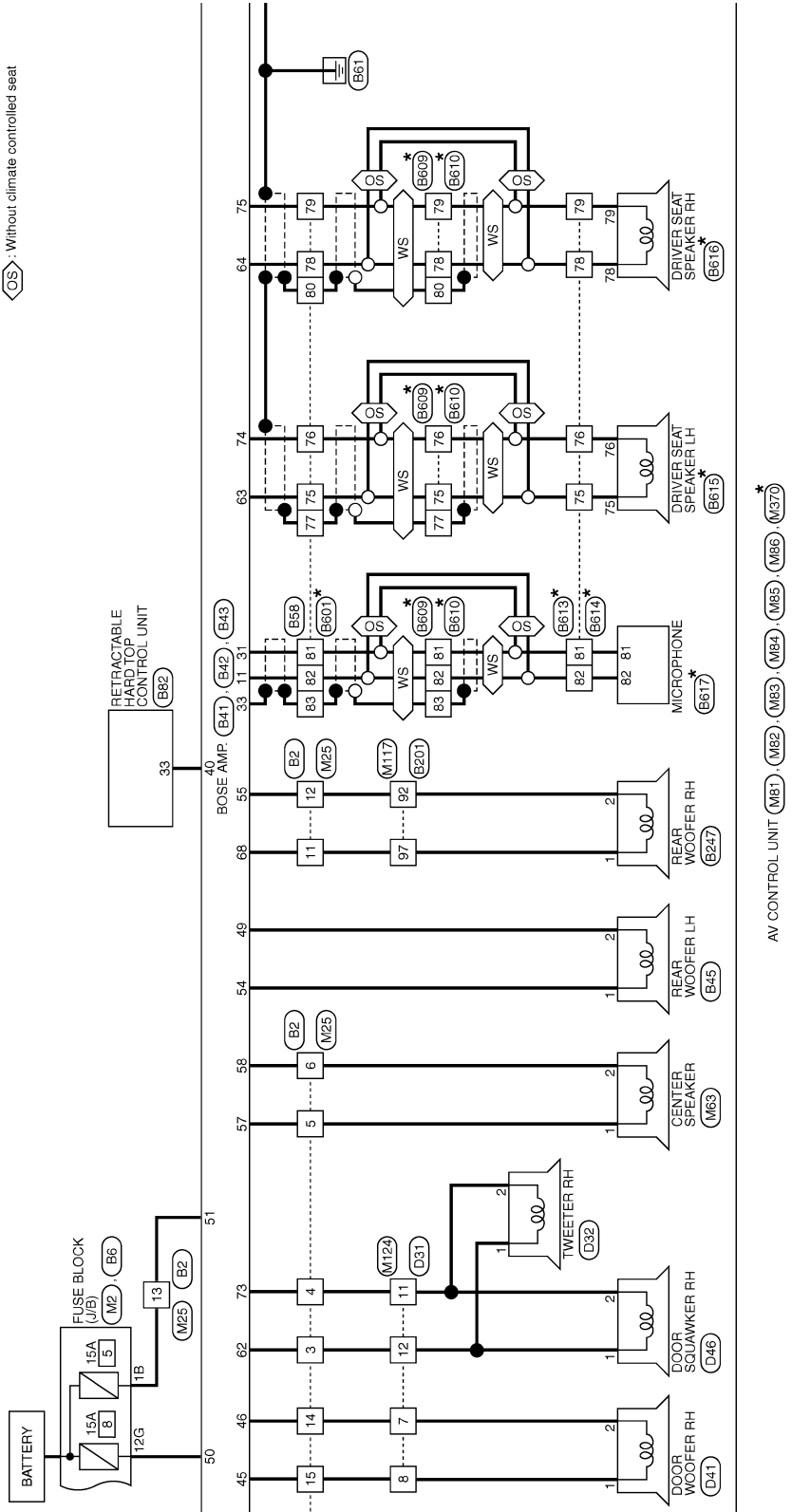
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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

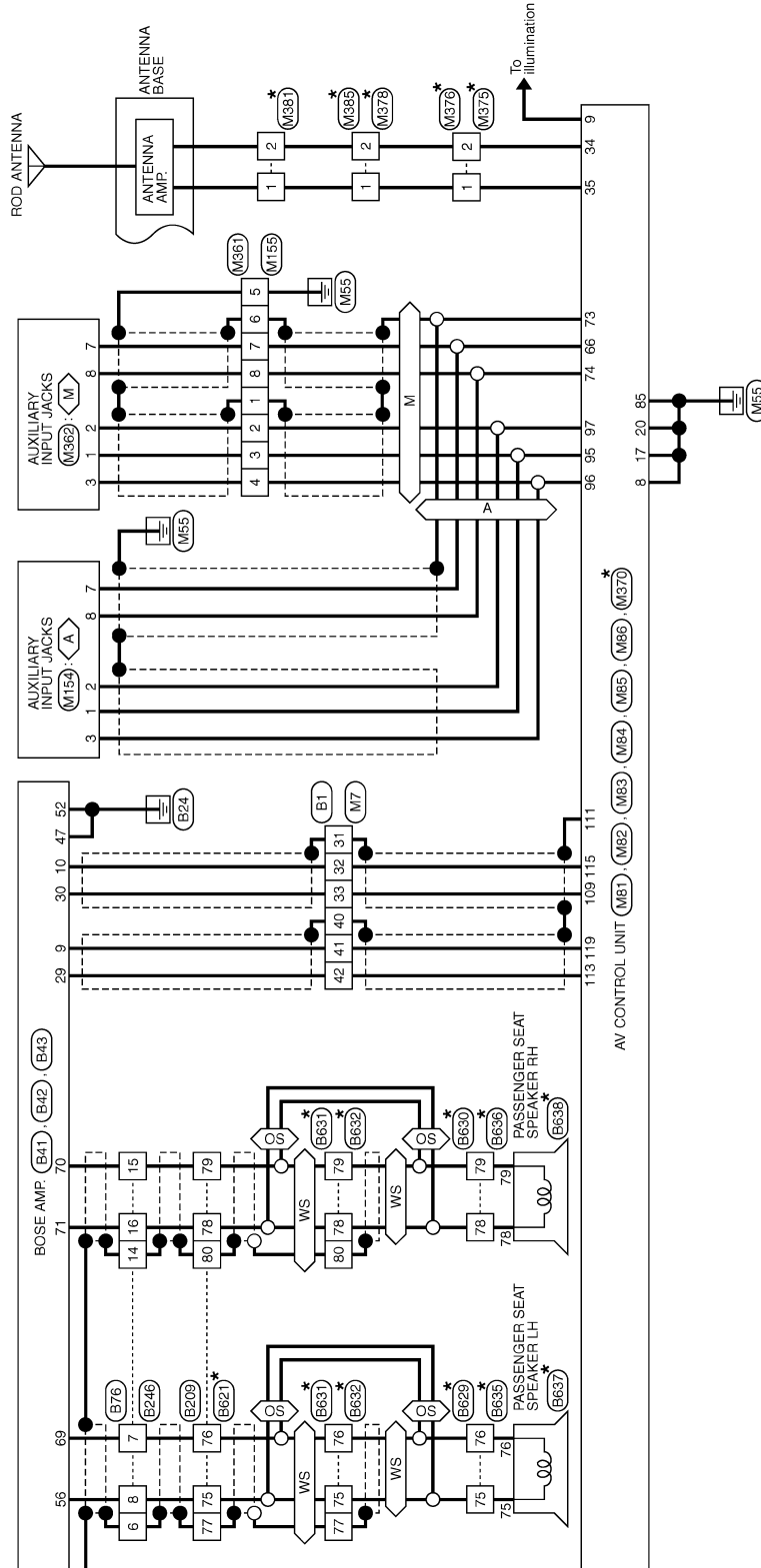
WS : With climate controlled seat  
OS : Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

# IPOD ADAPTER

- (A) : With A/T
- (M) : With M/T
- (WS) : With climate controlled seat
- (OS) : Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

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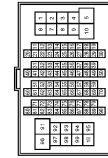
# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH0DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
46	W	-
49	R	- [With BOSE system]
50	G	- [With BOSE system]
57	V	-
61	O	-

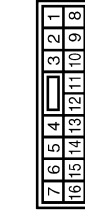


Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	P01FB-A



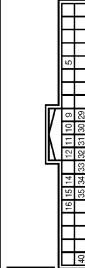
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	TH0DFW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
9	L	SOUND SIGNAL LH (-)
10	G	SOUND SIGNAL RH (-)
11	G	MICROPHONE SIGNAL (-)
14	R	AV COMM (L)
15	P	AV COMM (L)
16	W	ACC
29	P	SOUND SIGNAL LH (+)
30	R	SOUND SIGNAL RH (+)
31	V	MICROPHONE SIGNAL (+)
33	SHIELD	SHIELD
34	G	AV COMM (H)

15	G	-
16	W	-

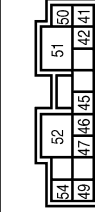
Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12G	Y	-

35	L	AV COMM (H)
40	V	ROOF STATUS SIGNAL (AUDIO)

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SSA12FBR-SJA2



Terminal No.	Color of Wire	Signal Name [Specification]
41	B	SOUND SIGNAL DOOR WOOFER LH (+)
42	W	SOUND SIGNAL DOOR WOOFER LH (-)
45	G	SOUND SIGNAL DOOR WOOFER RH (+)
46	R	SOUND SIGNAL DOOR WOOFER RH (-)
47	B	GND
49	P	SOUND SIGNAL WOOFER REAR LH (-)
50	Y	BATTERY
51	GR	BATTERY
52	B	GND
54	L	SOUND SIGNAL WOOFER REAR LH (+)

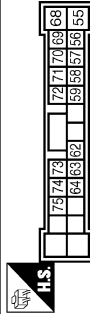
# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B43
Connector Name	BOSE AMP.
Connector Type	SCA1PBR-SG44



71	Y	SOUND SIGNAL FR RH HEADREST RH (+)
72	W	SOUND SIGNAL FR LH HEADREST LH (-)
73	LG	SOUND SIGNAL FRONT RH (-)
74	Y	SOUND SIGNAL FR LH HEADREST LH (-)
75	B	SOUND SIGNAL FR LH HEADREST RH (-)



Connector No.	B45
Connector Name	REAR WOOFER LH
Connector Type	NS02FW-CS



Connector No.	B58
Connector Name	WIRE TO WIRE
Connector Type	NS10PBR-CS

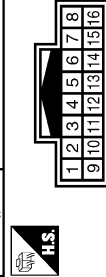


Terminal No.	Color of Wire	Signal Name [Specification]
55	O	SOUND SIGNAL WOOFER REAR RH (-)
56	W	SOUND SIGNAL FR RH HEADREST LH (+)
57	O	SOUND SIGNAL CENTER (+)
58	P	SOUND SIGNAL CENTER (-)
59	L	SOUND SIGNAL FRONT LH (+)
62	V	SOUND SIGNAL FRONT RH (+)
63	G	SOUND SIGNAL FR LH HEADREST LH (+)
64	W	SOUND SIGNAL FR LH HEADREST RH (+)
68	LG	SOUND SIGNAL WOOFER REAR RH (+)
69	B	SOUND SIGNAL FR RH HEADREST LH (-)
70	G	SOUND SIGNAL FR RH HEADREST RH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
75	G	-
76	Y	-
77	SHIELD	-
78	W	-
79	B	-
80	SHIELD	-
81	Y	-
82	G	-
83	SHIELD	-

Connector No.	B76
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH

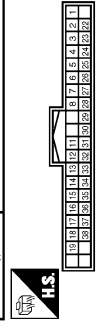


15	G	-
16	Y	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH08MMF-NH



Connector No.	B82
Connector Name	RETRACTABLE HARD TOP CONTROL UNIT
Connector Type	TH46PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	SHIELD	-

Terminal No.	33
Color of Wire	V
Signal Name [Specification]	ROOF STATUS SIGNAL (AUDIO)

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A  
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O  
P

AV

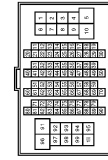
# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	THBDFW-GS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
40	GR	-
41	LG	-
42	O	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	G	-
48	Y	-
49	SHIELD	-
50	P	-

Connector No.	B236
Connector Name	SATELLITE RADIO TUNER
Connector Type	A16FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	Y	REQUEST (SAT->CONT)
9	O	COMM (SAT->CONT)
10	BR	COMM (CONT->SAT)
12	SB	BATTERY
15	B	GND

Connector No.	B209
Connector Name	WIRE TO WIRE
Connector Type	NS16FER-GS



Terminal No.	Color of Wire	Signal Name [Specification]
75	W	-
76	B	-
77	SHIELD	-
78	Y	-
79	G	-
80	SHIELD	-

Connector No.	B237
Connector Name	TEL ADAPTER UNIT
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BATTERY
2	LG	ACC
3	O	IGNITION
4	B	GND
5	SHIELD	SHIELD
6	SHIELD	SHIELD
7	B	MICROPHONE SIGNAL
8	R	MICROPHONE GND
9	Y	TEL VOICE SIGNAL (+)
10	G	TEL VOICE SIGNAL (-)
14	B	GND

19	B	GND
20	B	CONTROL SIGNAL
22	B	CONTROL SIGNAL
23	B	CONTROL SIGNAL
24	B	CONTROL SIGNAL
28	P	VEHICLE SPEED (8-PULSE)
29	W	MICROPHONE VCC

16	Y	ACC
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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

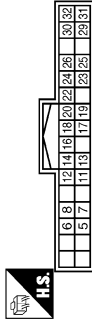
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	E238
Connector Name	TEL ADAPTER UNIT
Connector Type	TH8BFW-NH



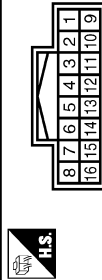
Terminal No.	Color of Wire	Signal Name [Specification]
35	L	AV COMM (H)
36	P	AV COMM (L)

Connector No.	E241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

Connector No.	E246
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	OR	SENSOR SIGNAL 3
26	Y	VEHICLE SPEED (3-PULSE)
28	SB	ACC
30	B	GND
31	B	BATTERY
32	Y	BATTERY

Connector No.	E247
Connector Name	REAR WOOFER RH
Connector Type	NS32FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	E249
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

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P

AV

# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B309
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	—
2	W	—
3	Y	—
4	SHIELD	—

Connector No.	B311
Connector Name	REAR VIEW CAMERA
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	CAMERA ON SIGNAL
2	W	GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	B471
Connector Name	TEL ADAPTER UNIT
Connector Type	GT16C-1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
33	—	TEL ANTENNA
34	SHIELD	SHIELD

Connector No.	B472
Connector Name	TEL ANTENNA
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	—	—
2	SHIELD	—

Connector No.	B482
Connector Name	SATELLITE RADIO TUNER
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
33	—	SATELLITE ANTENNA
34	SHIELD	SHIELD

Connector No.	B483
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
3	—	—
4	SHIELD	—

Connector No.	B601
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	—
76	L	—
77	B/Y	—
78	R	—
79	G	—
80	B/W	—
81	B	—
82	W	—
83	B/R	—

Connector No.	B609
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	—
76	L	—
77	B/Y	—
78	R	—
79	G	—
80	B/W	—
81	B	—
82	W	—
83	B/R	—

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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B610
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



99	96	98	80	81	82	83		
88	85	104	105	75	76	77	78	79

Connector No.	B614
Connector Name	WIRE TO WIRE
Connector Type	A08FW



75	76	78	79	81	82
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Connector No.	B613
Connector Name	WIRE TO WIRE
Connector Type	A08MW



82	81	79	78	76	75
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Connector No.	B615
Connector Name	DRIVER SEAT SPEAKER LH
Connector Type	TK02FGY



76	75
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Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
78	R	-
79	G	-
81	B	-
82	W	-

Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-
78	-	-
79	-	-
81	-	-
82	-	-

Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B616
Connector Name	DRIVER SEAT SPEAKER RH
Connector Type	TK02FW



79	78
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Connector No.	B617
Connector Name	MICROPHONE
Connector Type	TK02FBR



82	81
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Connector No.	B621
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



95	92	91	78	78			
93	100	90	94	77	75	79	80

Connector No.	B629
Connector Name	WIRE TO WIRE
Connector Type	TK02MGY



75	76
----	----

Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Terminal No.	Color of Wire	Signal Name [Specification]
81	-	-
82	-	-

Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
78	L	-

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A  
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O  
P

# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B630
Connector Name	WIRE TO WIRE
Connector Type	TK02AW



Terminal No.	Color of Wire	Signal Name [Specification]
78	R	-
79	G	-

Connector No.	B631
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
76	P	-
77	L	-
78	B/Y	-
79	R	-
80	G	-
81	B/W	-

Connector No.	B632
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B635
Connector Name	WIRE TO WIRE
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B636
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B637
Connector Name	PASSENGER SEAT SPEAKER LH
Connector Type	TK02FGY



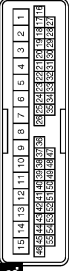
Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B638
Connector Name	PASSENGER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40PW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	W	-
12	L	-








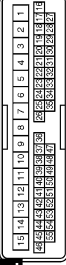








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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>D2</td></tr> <tr><td>Connector Name</td><td>TWEETER LH</td></tr> <tr><td>Connector Type</td><td>TK02MBF-P</td></tr> </table>  	Connector No.	D2	Connector Name	TWEETER LH	Connector Type	TK02MBF-P	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D2																							
Connector Name	TWEETER LH																							
Connector Type	TK02MBF-P																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D11</td></tr> <tr><td>Connector Name</td><td>DOOR WOOFER LH</td></tr> <tr><td>Connector Type</td><td>NS02FW-CS</td></tr> </table>  	Connector No.	D11	Connector Name	DOOR WOOFER LH	Connector Type	NS02FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>G</td><td>R</td></tr> </table>	Terminal No.	1	2	Color of Wire	G	R	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D11																							
Connector Name	DOOR WOOFER LH																							
Connector Type	NS02FW-CS																							
Terminal No.	1	2																						
Color of Wire	G	R																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D16</td></tr> <tr><td>Connector Name</td><td>DOOR SQUAWKER LH</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table>  	Connector No.	D16	Connector Name	DOOR SQUAWKER LH	Connector Type	TK02FBR	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D16																							
Connector Name	DOOR SQUAWKER LH																							
Connector Type	TK02FBR																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
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Connector No.	D31																							
Connector Name	WIRE TO WIRE																							
Connector Type	TH40FW-CS15																							
Terminal No.	7	8	11	12																				
Color of Wire	R	G	W	L																				
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D32</td></tr> <tr><td>Connector Name</td><td>TWEETER RH</td></tr> <tr><td>Connector Type</td><td>TK02MBF-P</td></tr> </table>  	Connector No.	D32	Connector Name	TWEETER RH	Connector Type	TK02MBF-P	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D32																							
Connector Name	TWEETER RH																							
Connector Type	TK02MBF-P																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D41</td></tr> <tr><td>Connector Name</td><td>DOOR WOOFER RH</td></tr> <tr><td>Connector Type</td><td>NS02FW-CS</td></tr> </table>  	Connector No.	D41	Connector Name	DOOR WOOFER RH	Connector Type	NS02FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>G</td><td>R</td></tr> </table>	Terminal No.	1	2	Color of Wire	G	R	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D41																							
Connector Name	DOOR WOOFER RH																							
Connector Type	NS02FW-CS																							
Terminal No.	1	2																						
Color of Wire	G	R																						
Signal Name [Specification]																								
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Connector No.	D46																							
Connector Name	DOOR SQUAWKER RH																							
Connector Type	TK02FBR																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>E5</td></tr> <tr><td>Connector Name</td><td>POWER DISTRIBUTION MODULE</td></tr> <tr><td>Connector Type</td><td>TH20FW-CS12-M4-1V</td></tr> </table>  	Connector No.	E5	Connector Name	POWER DISTRIBUTION MODULE	Connector Type	TH20FW-CS12-M4-1V	<table border="1"> <tr><td>Terminal No.</td><td>25</td></tr> <tr><td>Color of Wire</td><td>G</td></tr> </table>	Terminal No.	25	Color of Wire	G	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]											
Connector No.	E5																							
Connector Name	POWER DISTRIBUTION MODULE																							
Connector Type	TH20FW-CS12-M4-1V																							
Terminal No.	25																							
Color of Wire	G																							
Signal Name [Specification]																								

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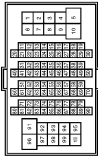
# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]


## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-MS10-TM4



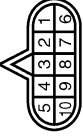
Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	
68	W	
88	O	

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH (WITH A/T)
Connector Type	TB01FW




Terminal No.	Color of Wire	Signal Name [Specification]
1	O	

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY




Terminal No.	Color of Wire	Signal Name [Specification]
7	R	

Connector No.	F55
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02EB



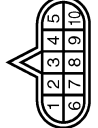
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	O	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-MS10




Terminal No.	Color of Wire	Signal Name [Specification]
30	R	
31	R	
41	O	

Connector No.	F157
Connector Name	TOM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG




Terminal No.	Color of Wire	Signal Name [Specification]
7	L	REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS30FPW-M2



Terminal No.	Color of Wire	Signal Name [Specification]
ZA	G	
5A	L	

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FPV-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1B	V	- [Without NAV]

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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



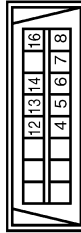
Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
46	SB	- [Without NAVI]
49	R	- [With BOSE system]
50	G	- [With BOSE system]
57	O	-
61	O	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



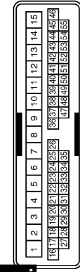
Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
69	G	-
89	O	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MM-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	W	-
8	B	-
11	W	-
12	L	-

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MM



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	R	-

Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

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# IPOD ADAPTER

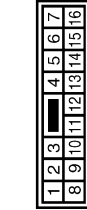
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[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

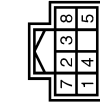
15	G	-
16	W	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	SB	-
5	Y	-
6	LG	-
7	B	-
11	L	-
12	P	-
13	V	- [Without NAV]
14	R	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



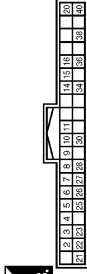
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M29
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40PW-NH



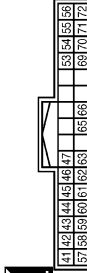
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

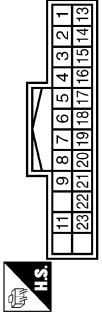
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M68
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS2FL-M2-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	O	ACC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
11	P	COMM (CONT->DISP)
13	BR	INVERTER GND

Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-GS2

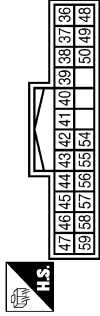


Terminal No.	Color of Wire	Signal Name [Specification]
6	P	STRG SW A
7	V	ACC
8	B	GND
9	L	ILLUMINATION
15	B	STRG SW GND
16	L	STRG SW B
17	B	GND
18	Y	BATTERY
20	B	GND

14	LG	SIGNAL GND
15	SR	COMPOSITE IMAGE SIGNAL
16	BR	COMPOSITE SYNC
17	G	RGB (RED) SIGNAL
18	P	RGB (BLUE) SIGNAL
19	W	RGB SYNC
20	G	VP
21	SHIELD	SHIELD
22	L	COMM (DISP->CONT)
23	SHIELD	SHIELD

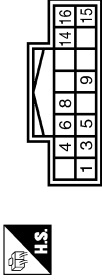
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	ACC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (BLUE) SIGNAL
39	L	RGB (GREEN) SIGNAL
40	G	RGB (RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (YS) SIGNAL
44	L	COMM (DISP->CONT)
45	R	HP
46	LG	SIGNAL GND

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



47	O	SIGNAL VCC
48	BR	COMPOSITE SYNC
49	Y	SHIELD
50	SHIELD	SHIELD
55	SHIELD	SHIELD
56	P	COMM (CONT->DISP)
57	G	VP
58	BR	INVERTER GND
59	Y	INVERTER VCC

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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH



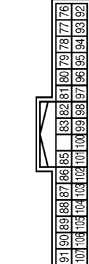
Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	GR	CAMERA CONNECTION RECOGNITION
73	B	SHIELD
74	R	AUX IMAGE GND

Connector No.	M106
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



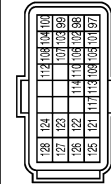
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	- [Without NAVI]
2	W	- [Without NAVI]
3	R	- [Without NAVI]

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
79	P	TEL VOICE SIGNAL (-)
80	L	TEL VOICE SIGNAL (+)
81	SHIELD	SHIELD
82	G	iPod SOUND SIGNAL RH (-)
83	B	iPod SOUND SIGNAL RH (+)
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	G	AV COMM (H) [With BOSE system]
89	R	AV COMM (L) [With BOSE system]
90	SB	AV COMM (H) [With BOSE system]

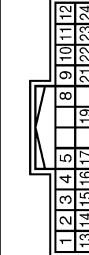
Connector No.	M107
Connector Name	ECM
Connector Type	RN24FGY-R26-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

Terminal No.	Color of Wire	Signal Name [Specification]
91	Y	AV COMM (L) [With BOSE system]
95	R	AUX SOUND SIGNAL RH (+)
96	W	AUX SOUND SIGNAL LH (+)
97	B	AUX SOUND SIGNAL LH (-)
98	W	iPod SOUND SIGNAL LH (-)
99	R	iPod SOUND SIGNAL LH (+)
100	SHIELD	SHIELD
101	BR	SW GND
103	SB	DISK EJECT SIGNAL
104	G	IGNITION
105	O	REVERSE
106	SB	PARKING BRAKE
107	GR	VEHICLE SPEED (3-PULSE)

Connector No.	M111
Connector Name	iPOD ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod ADAPTER->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTITY
12	W	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

Connector No.	M86
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH25FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
109	R	SOUND SIGNAL RH (+)
111	B	SHIELD
113	P	SOUND SIGNAL LH (-)
115	G	SOUND SIGNAL RH (-)
119	L	SOUND SIGNAL LH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
14	C	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	R	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)

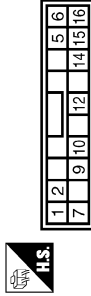
# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M112
Connector Name	iPod SIDE (WITH A-7)
Connector Type	IP18FCY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M114
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



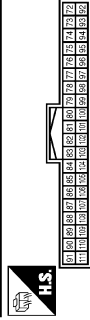
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	O	-
4	SHIELD	-
5	W	-
6	B	-
7	R	-
8	BR	-
9	W	-
10	W	-
11	SHIELD	-

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH68MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
40	Y	-
41	G	-
42	LG	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	P	-
48	I	-
49	SHIELD	-
50	V	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



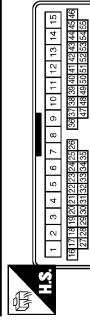
Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TH38MW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	SB	-
12	BR	-

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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

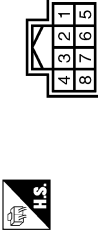
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M155
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



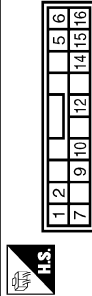
Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	B	
6	SHIELD	
7	G	
8	R	

Connector No.	M181
Connector Name	WIRE TO WIRE
Connector Type	TH12MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	G	
3	O	
4	SHIELD	
5	W	
6	B	
7	R	
8	BR	
9	W	
10	L	
11	SHIELD	

Connector No.	M182
Connector Name	IPOD SIDE (WITH M/T)
Connector Type	IP18FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	L	iPod CONNECTION RECOGNITION GND
10	BR	CHARGE POWER
12	W	SHIELD
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTITY

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



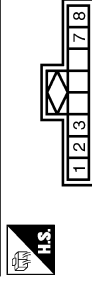
Terminal No.	Color of Wire	Signal Name [Specification]
14	-	
15	-	
17	-	

Connector No.	M361
Connector Name	WIRE TO WIRE
Connector Type	TH08MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	SHIELD	
6	SHIELD	
7	G	
8	R	

Connector No.	M362
Connector Name	AUXILIARY INPUT JACKS (WITH M/T)
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M370
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	GT13SH-2 /S-HU



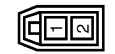
Terminal No.	Color of Wire	Signal Name [Specification]
34	-	AM-FM MAIN
35	-	ANTENNA AMP_ON SIGNAL

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SSH-1 /IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1 /S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SSN-1 /IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M381
Connector Name	ANTENNA BASE
Connector Type	GT13SSN-1 /IPP-HU



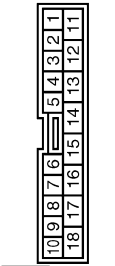
Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP_ON SIGNAL
2	-	AM-FM MAIN

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1 /S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TR10FW-NSS



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	- [Without NAVI]
2	W	- [Without NAVI]
3	SHIELD	-

Connector No.	R7
Connector Name	MICROPHONE
Connector Type	TR10FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	MICROPHONE SIGNAL [Without NAVI]
2	SHIELD	MICROPHONE GND
4	G	MICROPHONE VCC [Without NAVI]

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# SATELLITE RADIO TUNER

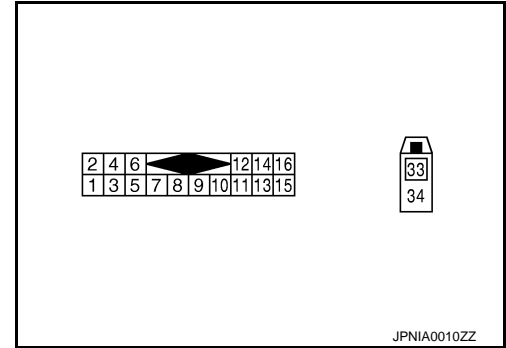
< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## SATELLITE RADIO TUNER

### Reference Value

INFOID:000000004371663



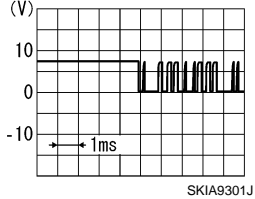
### PHYSICAL VALUES

Terminal		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/Output			
2 (R)	1 (G)	Satellite radio sound signal LH	Output	Ignition switch ON	When satellite radio mode is selected.	<p>SKIB3609E</p>
4 (B)	3 (W)	Satellite radio sound signal RH	Output	Ignition switch ON	When satellite radio mode is selected	<p>SKIB3609E</p>
5	—	Shield	—	—	—	—
6	—	Shield	—	—	—	—
8 (Y)	Ground	Request signal (SAT→CONT)	Output	Ignition switch ON	When satellite radio mode is selected.	<p>SKIA9299J</p>
9 (O)	Ground	Communication signal (SAT→CONT)	Output	Ignition switch ON	When satellite radio mode is selected.	<p>SKIA9300J</p>

# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

Terminal		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/Output			
10 (BR)	Ground	Communication signal (CONT→SAT)	Input	Ignition switch ON	When satellite radio mode is selected.	
12 (SB)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
15 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
16 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
33	—	Satellite antenna	Input	—	—	—
34	—	Shield	—	—	—	—

Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM -

INFOID:000000004928947

**NOTE:**

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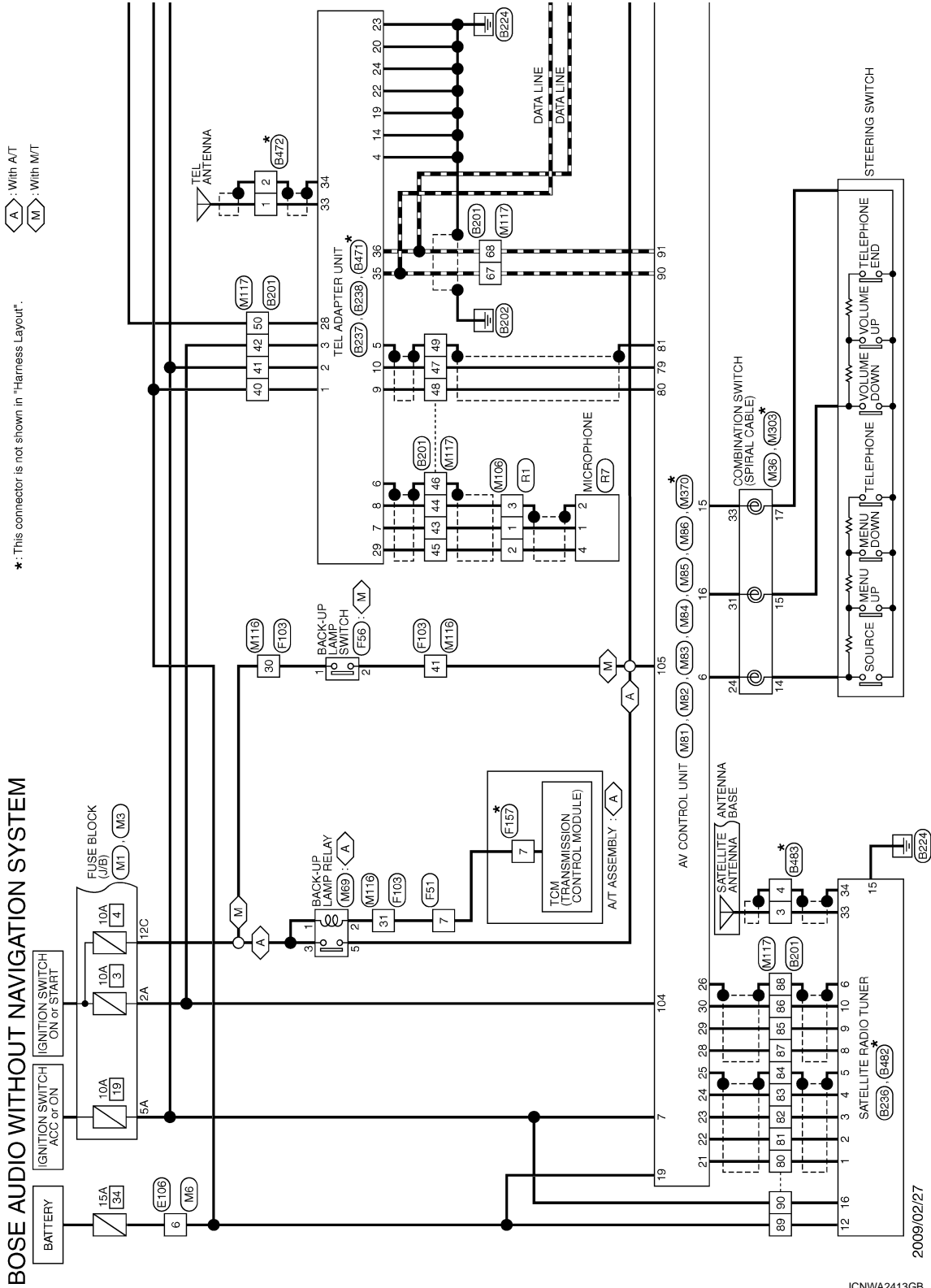
AV

# SATELLITE RADIO TUNER

[BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

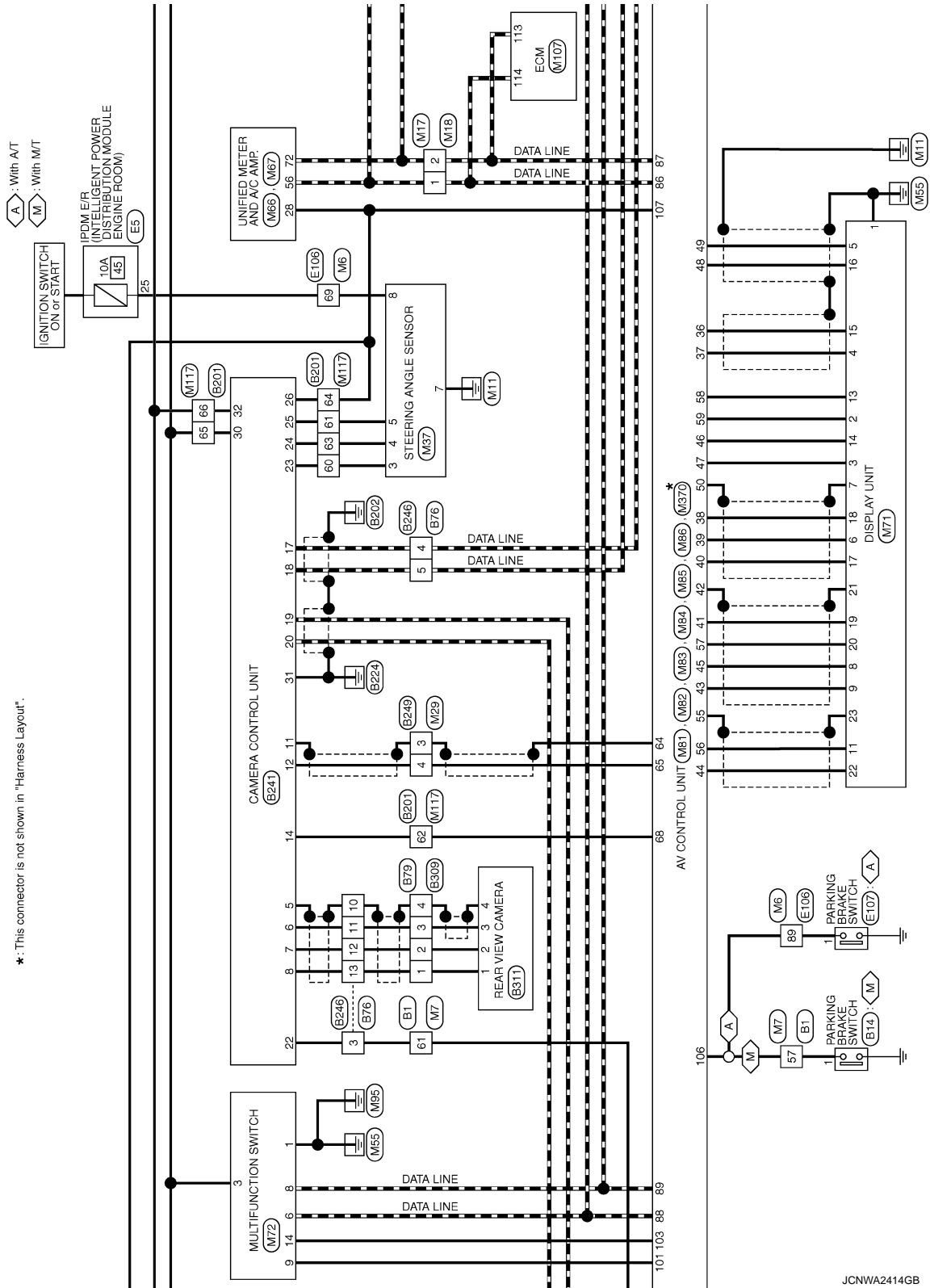




# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]



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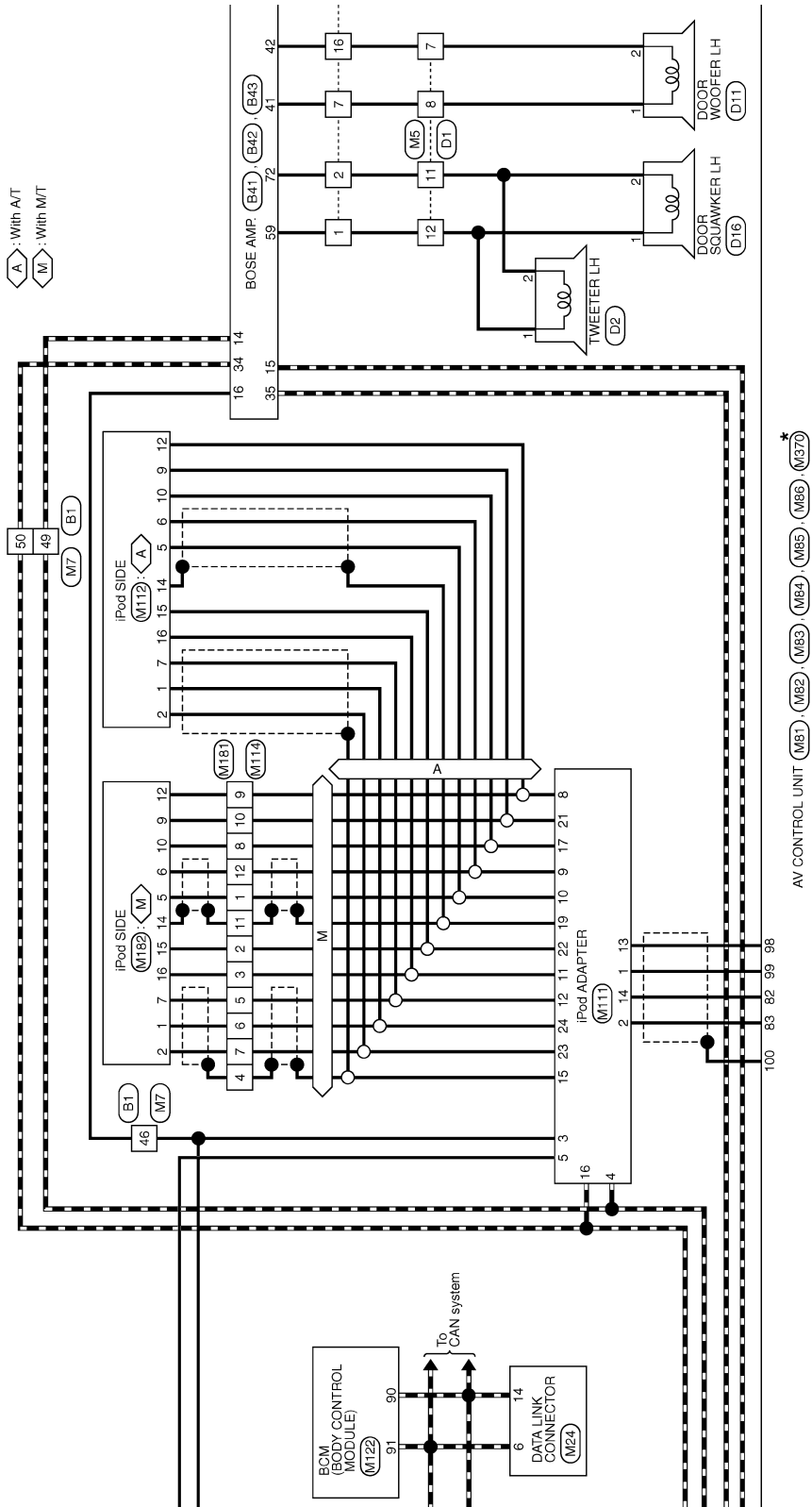
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# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]



\*: This connector is not shown in "Harness Layout".

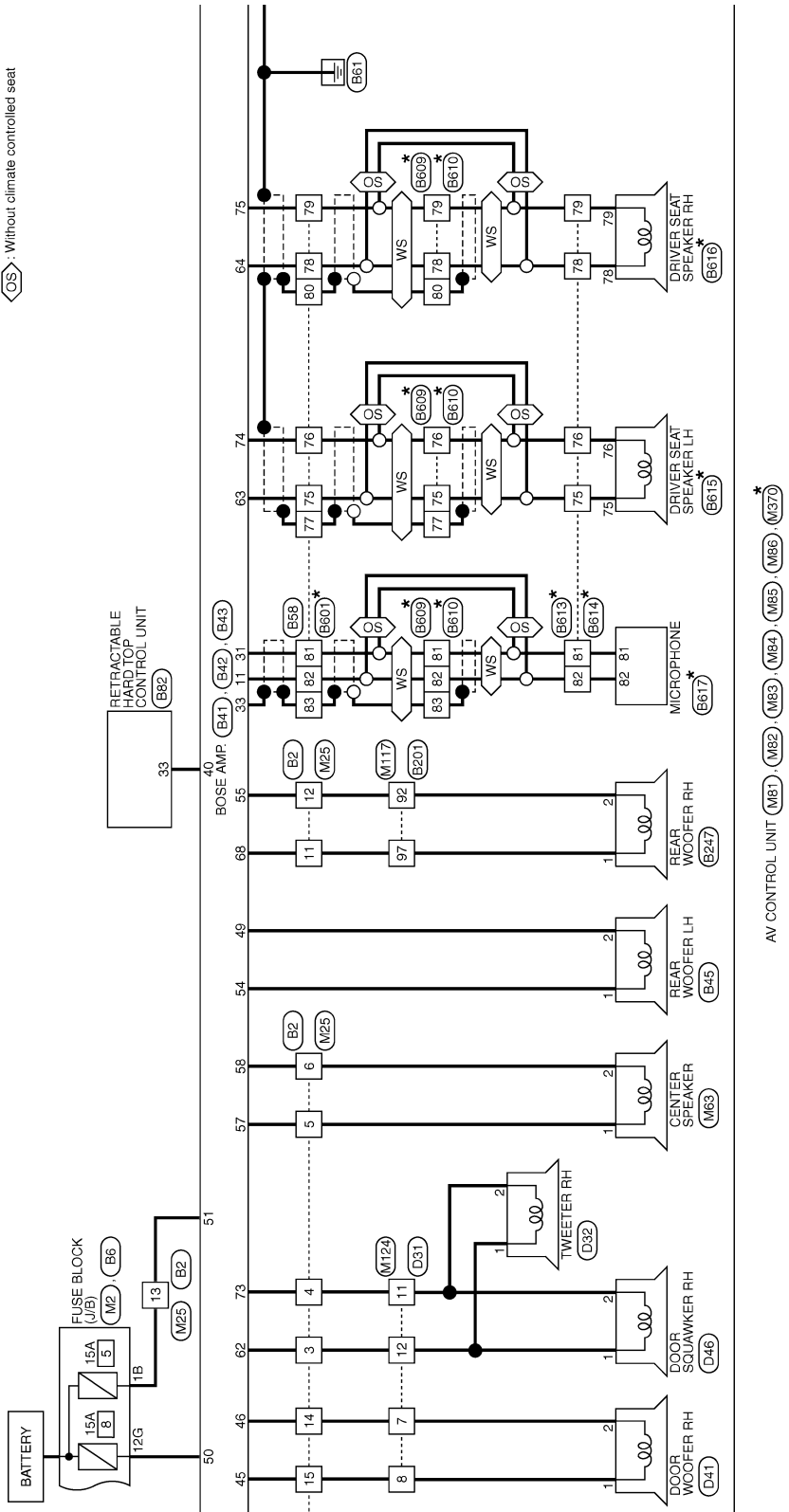
JCNWA2415GB

# SATELLITE RADIO TUNER

[BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

WS: With climate controlled seat  
 OS: Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

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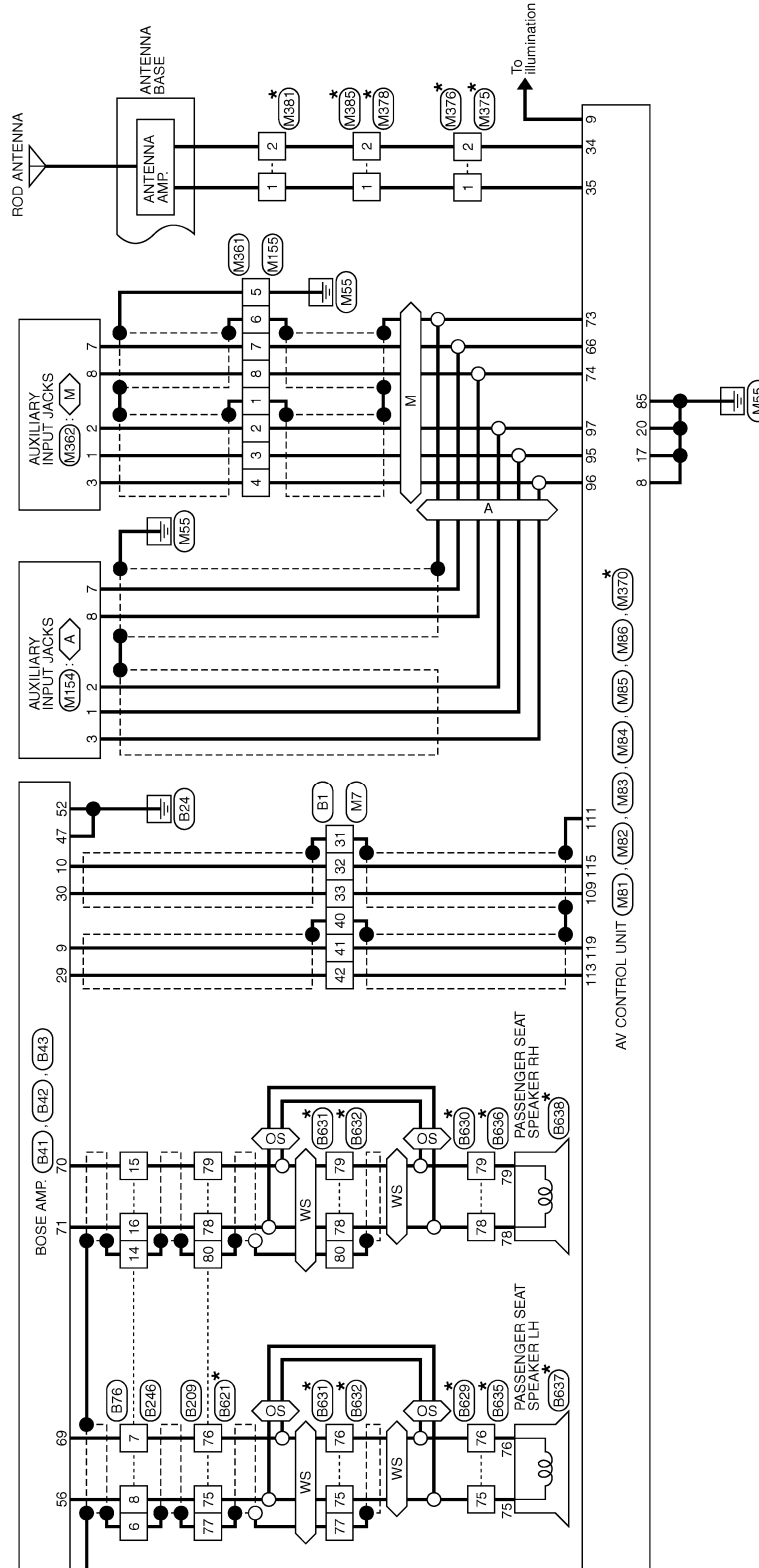
JCNWA2416GB

# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

- : With A/T
- : With M/T
- : With climate controlled seat
- : Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

JCNWA2417GB

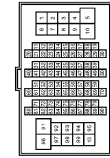
# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH00FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
46	W	-
49	R	- [With BOSE system]
50	G	- [With BOSE system]
57	V	-
61	O	-

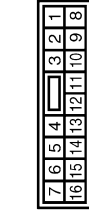


Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	P01FB-A



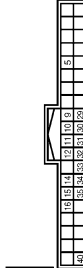
Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-

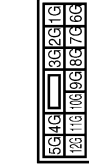
Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	TH00FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
9	L	SOUND SIGNAL LH (-)
10	G	SOUND SIGNAL RH (-)
11	G	MICROPHONE SIGNAL (-)
14	R	AV COMM (L)
15	P	AV COMM (L)
16	W	ACC
29	P	SOUND SIGNAL LH (+)
30	R	SOUND SIGNAL RH (+)
31	Y	MICROPHONE SIGNAL (+)
33	SHIELD	SHIELD
34	G	AV COMM (H)

15	G	-
16	W	-

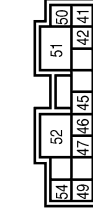
Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12G	Y	-

35	L	AV COMM (H)
40	V	ROOF STATUS SIGNAL (AUDIO)

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SGA12FBR-SJA2



Terminal No.	Color of Wire	Signal Name [Specification]
41	B	SOUND SIGNAL DOOR WOOFER LH (+)
42	W	SOUND SIGNAL DOOR WOOFER LH (-)
45	G	SOUND SIGNAL DOOR WOOFER RH (+)
46	R	SOUND SIGNAL DOOR WOOFER RH (-)
47	B	GND
49	P	SOUND SIGNAL WOOFER REAR LH (-)
50	Y	BATTERY
51	GR	BATTERY
52	B	GND
54	L	SOUND SIGNAL WOOFER REAR LH (+)

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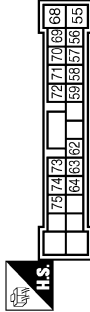
# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

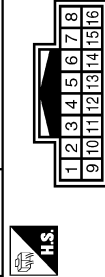
Connector No.	B43
Connector Name	BOSE AMP.
Connector Type	SCALIFERR-SG44



71	Y	SOUND SIGNAL FR RH HEADREST RH (+)
72	W	SOUND SIGNAL FRONT LH (-)
73	LG	SOUND SIGNAL FRONT RH (+)
74	Y	SOUND SIGNAL FR LH HEADREST LH (-)
75	B	SOUND SIGNAL FR LH HEADREST RH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
55	O	SOUND SIGNAL WOOFER REAR RH (-)
56	W	SOUND SIGNAL FR RH HEADREST LH (+)
57	O	SOUND SIGNAL CENTER (+)
58	P	SOUND SIGNAL CENTER (-)
59	L	SOUND SIGNAL FRONT LH (+)
62	V	SOUND SIGNAL FRONT RH (+)
63	G	SOUND SIGNAL FR LH HEADREST LH (+)
64	W	SOUND SIGNAL FR LH HEADREST RH (+)
68	LG	SOUND SIGNAL WOOFER REAR RH (+)
69	B	SOUND SIGNAL FR RH HEADREST LH (-)
70	G	SOUND SIGNAL FR RH HEADREST RH (-)

Connector No.	B76
Connector Name	WIRE TO WIRE
Connector Type	TH16BMW-NH



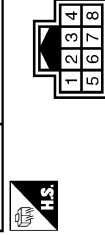
15	G	-
16	Y	-

Connector No.	B45
Connector Name	REAR WOOFER LH
Connector Type	NS302FW-CS



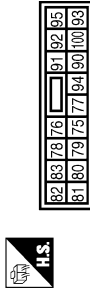
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH083MY-NH



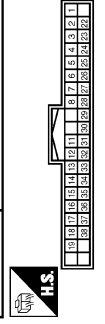
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	SHIELD	-

Connector No.	B88
Connector Name	WIRE TO WIRE
Connector Type	NS106BR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	G	-
76	Y	-
77	SHIELD	-
78	W	-
79	B	-
80	SHIELD	-
81	Y	-
82	G	-
83	SHIELD	-

Connector No.	B82
Connector Name	RETRACTABLE HARD TOP CONTROL UNIT
Connector Type	TH40PTV-NH



Terminal No.	Color of Wire	Signal Name [Specification]
33	V	ROOF STATUS SIGNAL (AUDIO)

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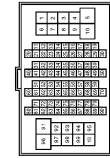
# SATELLITE RADIO TUNER

[BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
40	GR	-
41	LG	-
42	O	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	G	-
48	Y	-
49	SHIELD	-
50	P	-

Connector No.	B206
Connector Name	SATELLITE RADIO TUNER
Connector Type	A16FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	Y	REQUEST (SAT->CONT)
9	O	COMM (SAT->CONT)
10	BR	COMM (CONT->SAT)
12	SB	BATTERY
15	B	GND

Connector No.	B2109
Connector Name	WIRE TO WIRE
Connector Type	NS16FER-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	W	-
76	B	-
77	SHIELD	-
78	Y	-
79	G	-
80	SHIELD	-

Connector No.	B237
Connector Name	TEL ADAPTER UNIT
Connector Type	TH82FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BATTERY
2	LG	ACC
3	O	IGNITION
4	B	GND
5	SHIELD	SHIELD
6	SHIELD	SHIELD
7	B	MICROPHONE SIGNAL
8	BR	MICROPHONE GND
9	Y	TEL VOICE SIGNAL (+)
10	G	TEL VOICE SIGNAL (-)
14	B	GND

19	B	GND
20	B	CONTROL SIGNAL
22	B	CONTROL SIGNAL
23	B	CONTROL SIGNAL
24	B	CONTROL SIGNAL
28	P	VEHICLE SPEED (8-PULSE)
29	W	MICROPHONE VCC

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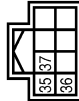
# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B238
Connector Name	TEL ADAPTER UNIT
Connector Type	TH8BFW-NH



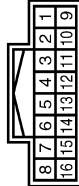
Terminal No.	Color of Wire	Signal Name [Specification]
35	L	AV COMM (H)
36	P	AV COMM (L)

Connector No.	B241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH82FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

Connector No.	B246
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	OR	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (8-PULSE)
30	SB	AGC
31	B	GND
32	Y	BATTERY

Connector No.	B247
Connector Name	REAR WOOFER RH
Connector Type	NS82FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	B249
Connector Name	WIRE TO WIRE
Connector Type	TH84FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-



# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B309
Connector Name	WIRE TO WIRE
Connector Type	TH8BFW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	Y	-
4	SHIELD	-

Connector No.	B311
Connector Name	REAR VIEW CAMERA
Connector Type	TH8MWN-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	CAMERA ON SIGNAL
2	W	GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	B471
Connector Name	TEL ADAPTER UNIT
Connector Type	GT16C-1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
33	-	TEL ANTENNA
34	SHIELD	SHIELD

Connector No.	B472
Connector Name	TEL ANTENNA
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	SHIELD	-

Connector No.	B492
Connector Name	SATELLITE RADIO TUNER
Connector Type	PAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
33	-	SATELLITE ANTENNA
34	SHIELD	SHIELD

Connector No.	B483
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU



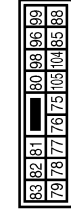
Terminal No.	Color of Wire	Signal Name [Specification]
3	-	-
4	SHIELD	-

Connector No.	B601
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B609
Connector Name	WIRE TO WIRE
Connector Type	NS16MY-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

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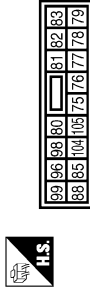
# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B610
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B613
Connector Name	WIRE TO WIRE
Connector Type	A08MW



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
78	R	-
79	G	-
81	B	-
82	W	-

Connector No.	B614
Connector Name	WIRE TO WIRE
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-
78	-	-
79	-	-
81	-	-
82	-	-

Connector No.	B615
Connector Name	DRIVER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B616
Connector Name	DRIVER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B617
Connector Name	MICROPHONE
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
81	-	-
82	-	-

Connector No.	B621
Connector Name	WIRE TO WIRE
Connector Type	NS16MBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B623
Connector Name	WIRE TO WIRE
Connector Type	TK02MGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-

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# SATELLITE RADIO TUNER

[BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B630
Connector Name	WIRE TO WIRE
Connector Type	TK02WW



Terminal No.	Color of Wire	Signal Name [Specification]
78	R	-
79	G	-

Connector No.	B631
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B632
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B633
Connector Name	WIRE TO WIRE
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B636
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B637
Connector Name	PASSENGER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B638
Connector Name	PASSENGER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40PW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	W	-
12	L	-

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P








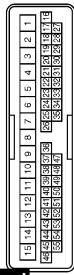







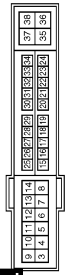
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# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>D2</td></tr> <tr><td>Connector Name</td><td>TWEETER LH</td></tr> <tr><td>Connector Type</td><td>TK02M8R-P</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td></td><td></td></tr> </table>	Connector No.	D2	Connector Name	TWEETER LH	Connector Type	TK02M8R-P	Terminal No.	1	2	Color of Wire	L	W	Signal Name [Specification]			<table border="1"> <tr><td>Connector No.</td><td>D11</td></tr> <tr><td>Connector Name</td><td>DOOR WOOFER LH</td></tr> <tr><td>Connector Type</td><td>NS02FW-CS</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>G</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td></td><td></td></tr> </table>	Connector No.	D11	Connector Name	DOOR WOOFER LH	Connector Type	NS02FW-CS	Terminal No.	1	2	Color of Wire	G	R	Signal Name [Specification]			<table border="1"> <tr><td>Connector No.</td><td>D16</td></tr> <tr><td>Connector Name</td><td>DOOR SQUAWKER LH</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td></td><td></td></tr> </table>	Connector No.	D16	Connector Name	DOOR SQUAWKER LH	Connector Type	TK02FBR	Terminal No.	1	2	Color of Wire	L	W	Signal Name [Specification]			<table border="1"> <tr><td>Connector No.</td><td>D31</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40FY-CS15</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>7</td><td>8</td><td>11</td><td>12</td></tr> <tr><td>Color of Wire</td><td>R</td><td>G</td><td>W</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td></td><td></td><td></td><td></td></tr> </table>	Connector No.	D31	Connector Name	WIRE TO WIRE	Connector Type	TH40FY-CS15	Terminal No.	7	8	11	12	Color of Wire	R	G	W	L	Signal Name [Specification]				
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Connector No.	D32																																																																				
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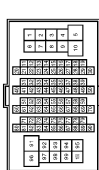
# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]


## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TK36FW-CS16-TM4




Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
6B	W	-
8B	O	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH (WITH A/T)
Connector Type	TB01FW




Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-D3Y




Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-

Connector No.	F55
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02FB




Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	O	-

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK36FW-NS10




Terminal No.	Color of Wire	Signal Name [Specification]
30	R	-
31	R	-
41	O	-

Connector No.	F157
Connector Name	TOM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG




Terminal No.	Color of Wire	Signal Name [Specification]
7	L	REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



Terminal No.	Color of Wire	Signal Name [Specification]
2A	G	-
5A	L	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1B	V	- [Without NAV]

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A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

AV

# SATELLITE RADIO TUNER

[BOSE AUDIO WITHOUT NAVIGATION]

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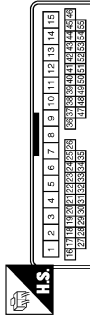
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1ZC	R	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	W	-
8	B	-
11	W	-
12	L	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



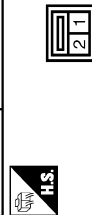
Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
89	G	-
89	O	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



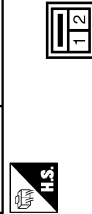
Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
46	SB	- [Without NAV]
49	R	- [With BOSE system]
50	G	- [With BOSE system]
57	O	-
61	O	-

Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



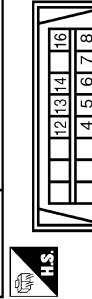
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

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# SATELLITE RADIO TUNER

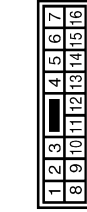
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[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

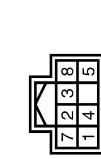
15	G	-
16	W	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	HS16MFC-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	SB	-
5	Y	-
6	LG	-
7	B	-
11	L	-
12	P	-
13	V	-
14	R	-
		[Without NAV]

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



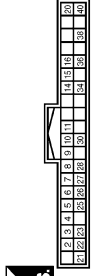
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M29
Connector Name	WIRE TO WIRE
Connector Type	TH04MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	M86
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FW-NH



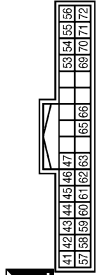
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M38
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M87
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

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A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# SATELLITE RADIO TUNER

[BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

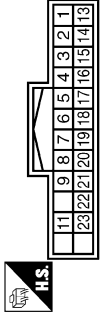
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M89
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS22FL-M2-LC



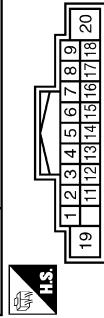
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	O	ACC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (G.GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
11	P	COMM (CONT->DISP)
13	BR	INVERTER GND

Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-CS2

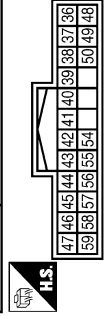


Terminal No.	Color of Wire	Signal Name [Specification]
6	P	STRG SW A
7	V	ACC
8	B	GND
9	L	ILLUMINATION
15	B	STRG SW GND
16	L	STRG SW B
17	B	GND
18	Y	BATTERY
20	B	GND

14	LG	SIGNAL GND
15	SR	COMPOSITE IMAGE SIGNAL
16	BR	COMPOSITE SYNC
17	G	RGB (R.RED) SIGNAL
18	P	RGB (R) U/S SIGNAL
19	W	RGB SYNC
20	G	VP
21	SHIELD	SHIELD
22	L	COMM (DISP->CONT)
23	SHIELD	SHIELD

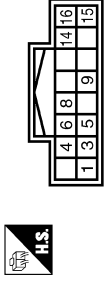
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	ACC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (B.BLUE) SIGNAL
39	L	RGB (G.GREEN) SIGNAL
40	G	RGB (R.RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (YS) SIGNAL
44	L	COMM (DISP->CONT)
45	R	HP
46	LG	SIGNAL GND

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



47	O	SIGNAL VCC
48	BR	COMPOSITE SYNC
49	L	SHIELD
50	SHIELD	SHIELD
55	P	COMM (CONT->DISP)
56	G	VP
57	G	INVERTER GND
59	Y	INVERTER VCC



# SATELLITE RADIO TUNER

[BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

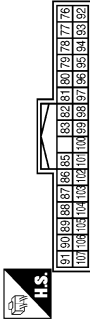
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH



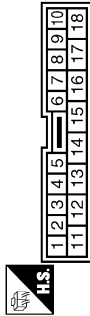
Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	GR	CAMERA CONNECTION RECOGNITION
73	B	SHIELD
74	R	AUX IMAGE GND

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH22FW-NH



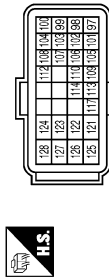
Terminal No.	Color of Wire	Signal Name [Specification]
79	P	TEL VOICE SIGNAL (-)
80	L	TEL VOICE SIGNAL (+)
81	SHIELD	SHIELD
82	G	iPod SOUND SIGNAL RH (-)
83	B	iPod SOUND SIGNAL RH (+)
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	G	AV COMM (H) [With BOSE system]
89	R	AV COMM (L) [With BOSE system]
90	SB	AV COMM (H) [With BOSE system]

Connector No.	M108
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	- [Without NAVI]
2	W	- [Without NAVI]
3	R	- [Without NAVI]

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-R28-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

Terminal No.	Color of Wire	Signal Name [Specification]
91	Y	AV COMM (L) [With BOSE system]
95	R	AUX SOUND SIGNAL RH (+)
96	W	AUX SOUND SIGNAL LH (+)
97	B	AUX SOUND SIGNAL GND
98	W	iPod SOUND SIGNAL LH (-)
99	R	iPod SOUND SIGNAL LH (+)
100	SHIELD	SHIELD
101	BR	SW GND
103	SB	DISK EJECT SIGNAL
104	G	IGNITION
105	O	REVERSE
106	SB	PARKING BRAKE
107	GR	VEHICLE SPEED (3-PULSE)

Terminal No.	Color of Wire	Signal Name [Specification]
109	R	SOUND SIGNAL RH (+)
111	B	SHIELD
113	P	SOUND SIGNAL LH (+)
115	G	SOUND SIGNAL RH (-)
119	L	SOUND SIGNAL LH (-)

Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod ADAPTER->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTITY
12	W	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
14	G	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	R	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)

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I  
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AV

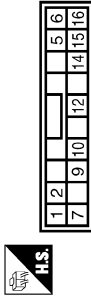
# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

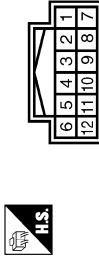
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M112
Connector Name	iPod SIDE (WITH A/T)
Connector Type	IP1BE5Y



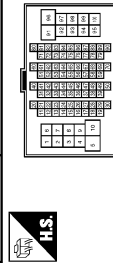
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M114
Connector Name	WIRE TO WIRE
Connector Type	TH12RW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	O	-
4	SHIELD	-
5	W	-
6	B	-
7	R	-
8	BR	-
9	W	-
10	W	-
11	SHIELD	-

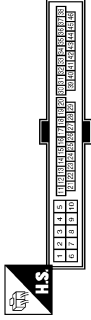
Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH16BW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
40	Y	-
41	G	-
42	LG	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	P	-
48	L	-
49	SHIELD	-
50	V	-

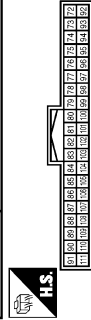
Terminal No.	12	P	-
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Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MW-NS10



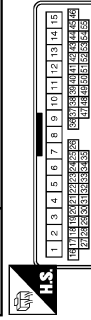
Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MP-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	SB	-
12	BR	-

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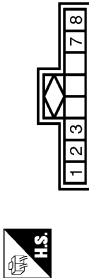
# SATELLITE RADIO TUNER

[BOSE AUDIO WITHOUT NAVIGATION]

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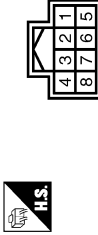
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M184
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)
Connector Type	AB8FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M185
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R	-
4	W	-
5	B	-
6	SHIELD	-
7	G	-
8	R	-

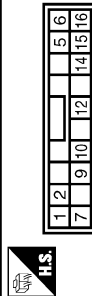
Connector No.	M181
Connector Name	WIRE TO WIRE
Connector Type	TH12MMF-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	O	-
4	SHIELD	-
5	W	-
6	B	-
7	R	-
8	BR	-
9	W	-
10	L	-
11	SHIELD	-

12	P	-
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Connector No.	M182
Connector Name	iPod SIDE (WITH M/T)
Connector Type	IP18FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	L	iPod CONNECTION RECOGNITION GND
10	BR	CHARGE POWER
12	W	SHIELD
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	-	-
15	-	-
17	-	-

Connector No.	M361
Connector Name	WIRE TO WIRE
Connector Type	TH08MMF-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R	-
4	W	-
5	SHIELD	-
6	SHIELD	-
7	G	-
8	R	-

Connector No.	M362
Connector Name	AUXILIARY INPUT JACKS (WITH M/T)
Connector Type	AB8FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

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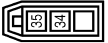
# SATELLITE RADIO TUNER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]



## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M370
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	GT13SSH-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
34	--	AM-FM MAIN
35	--	ANTENNA AMP. ON SIGNAL

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SSH-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SSH-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SSH-1/1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	M381
Connector Name	ANTENNA BASE
Connector Type	GT13SSH-1/1PP-HU


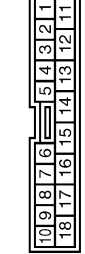
Terminal No.	Color of Wire	Signal Name [Specification]
1	--	ANTENNA AMP. ON SIGNAL
2	--	AM-FM MAIN

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SSH-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TK10PW-N58

Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-- [Without NAVI]
2	W	-- [Without NAVI]
3	SHIELD	--

Connector No.	R7
Connector Name	MICROPHONE
Connector Type	TK6FW

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	MICROPHONE SIGNAL [Without NAVI]
2	SHIELD	MICROPHONE GND
4	G	MICROPHONE VCC [Without NAVI]

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# TEL ADAPTER UNIT

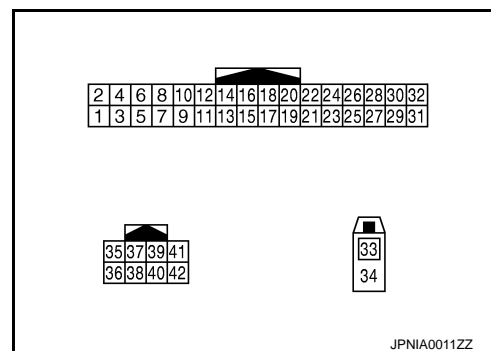
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[BOSE AUDIO WITHOUT NAVIGATION]

## TEL ADAPTER UNIT

Reference Value

INFOID:000000004371665



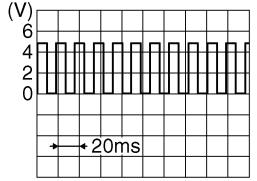
### PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
1 (GR)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
2 (LG)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
3 (O)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
4 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
5	—	Shield	—	—	—	—
6	—	Shield	—	—	—	—
7 (B)	8 (R)	Microphone signal	Input	Ignition switch ON	Give a voice	<p>PKIB5037J</p>
9 (Y)	10 (G)	TEL voice signal	Output	Ignition switch ON	During voice guide output with the  switch pressed.	<p>SKIB3609E</p>
14 (B)	Ground	Ground	—	Ignition switch ON	—	0 V

# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
19 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
20 (B)	Ground	Control signal	Input	Ignition switch ON	—	0 V
22 (B)	Ground	Control signal	Input	Ignition switch ON	—	0 V
23 (B)	Ground	Control signal	Input	Ignition switch ON	—	0 V
24 (B)	Ground	Control signal	Input	Ignition switch ON	—	0 V
28 (P)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is ap- prox. 40 km/h (25MPH)	<p><b>NOTE:</b> Maximum voltage may be 12.0 V due to specifications (connected units).</p>  <p style="text-align: right; font-size: small;">SKIA6649J</p>
29 (W)	8 (R)	Microphone VCC	Output	Ignition switch ON	—	5.0 V
33	—	TEL antenna	Input	—	—	—
34	—	Shield	—	—	—	—
35 (L)	—	AV communication signal (H)	Input/ Output	—	—	—
36 (P)	—	AV communication signal (L)	Input/ Output	—	—	—

## Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM -

INFOID:000000004928948

**NOTE:**

# TEL ADAPTER UNIT

[BOSE AUDIO WITHOUT NAVIGATION]

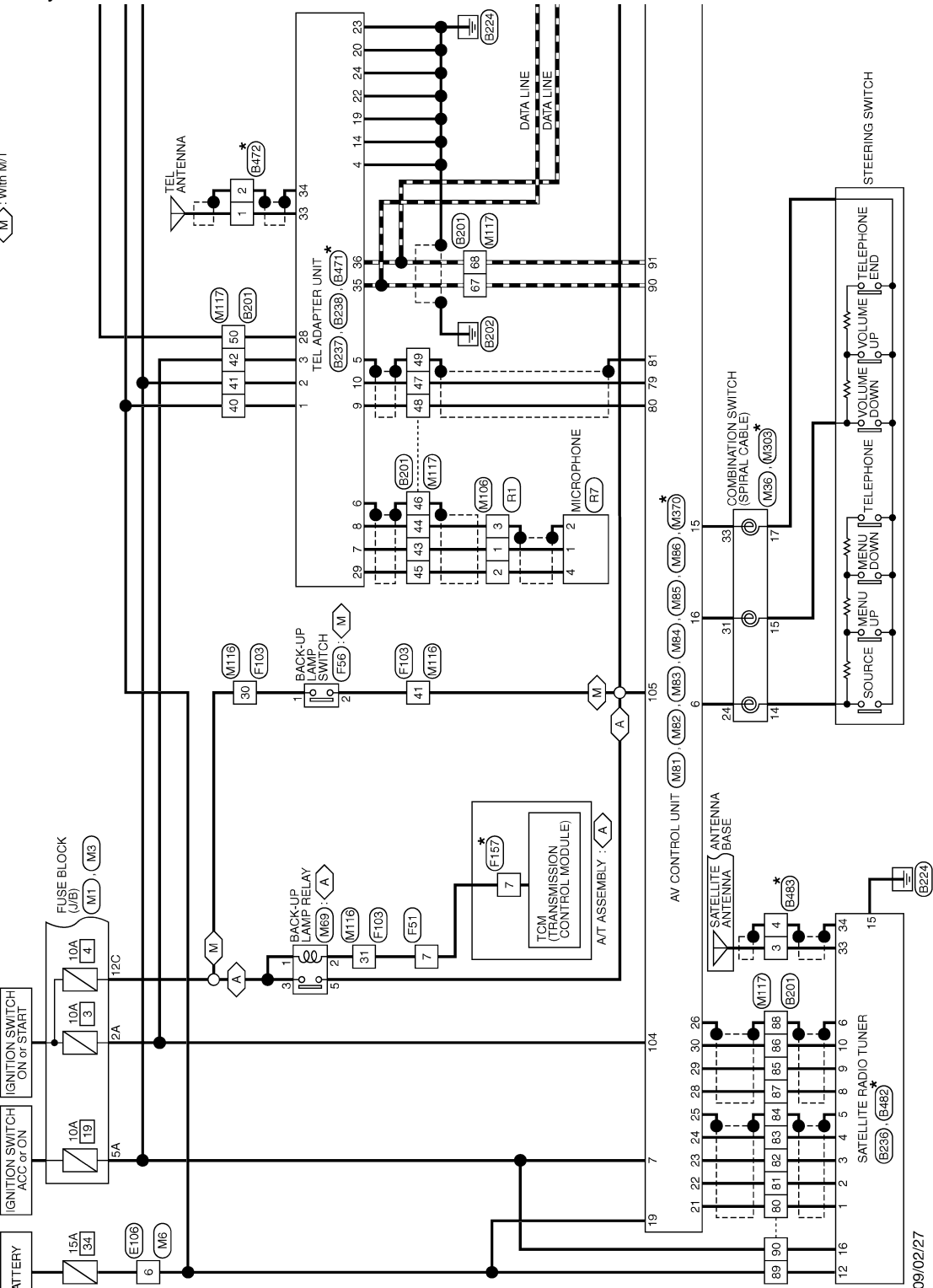
< ECU DIAGNOSIS INFORMATION >

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

⬠ : With A/T  
⬢ : With M/T

\*: This connector is not shown in "Harness Layout".



2009/02/27

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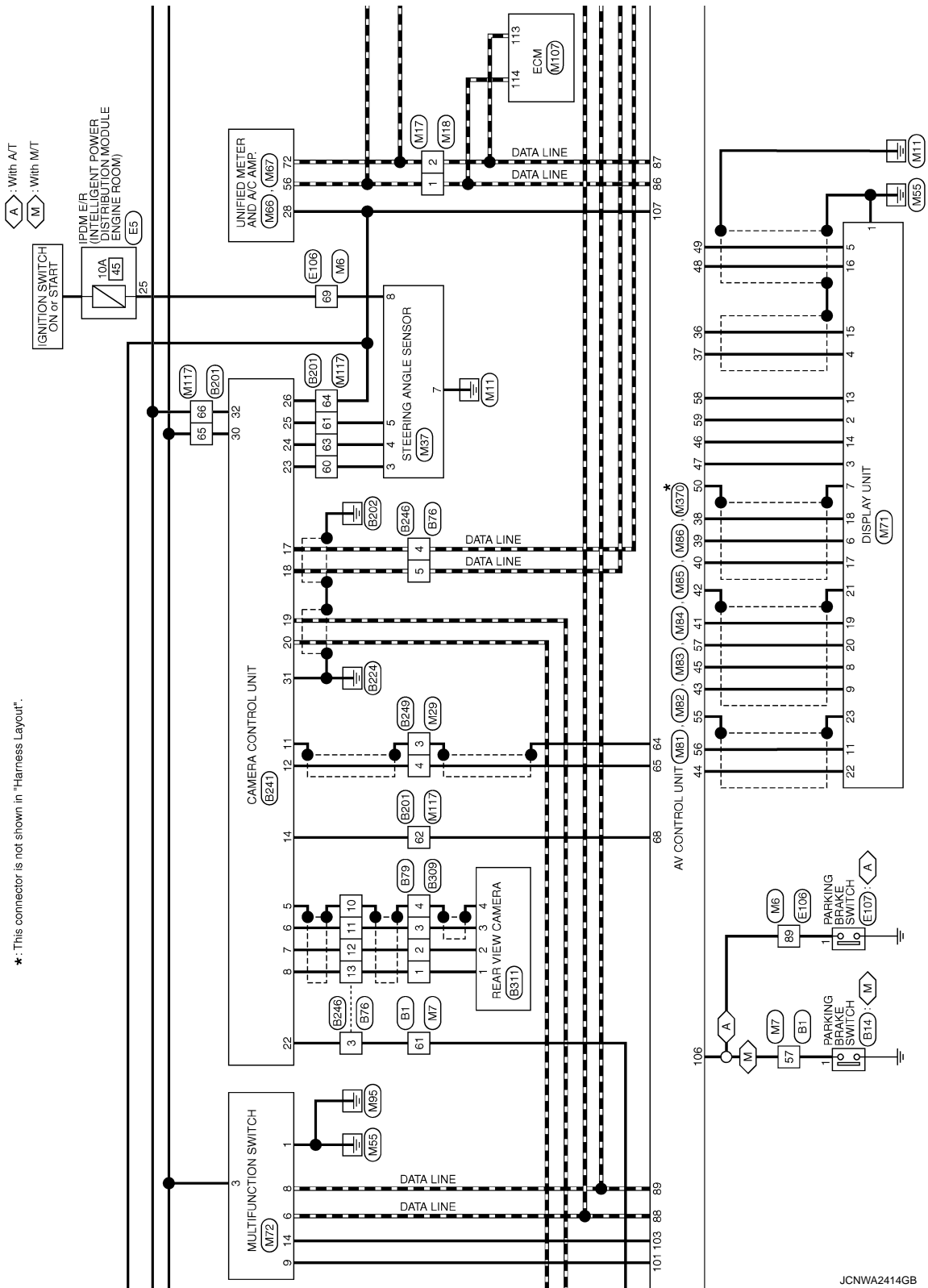
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AV

# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]



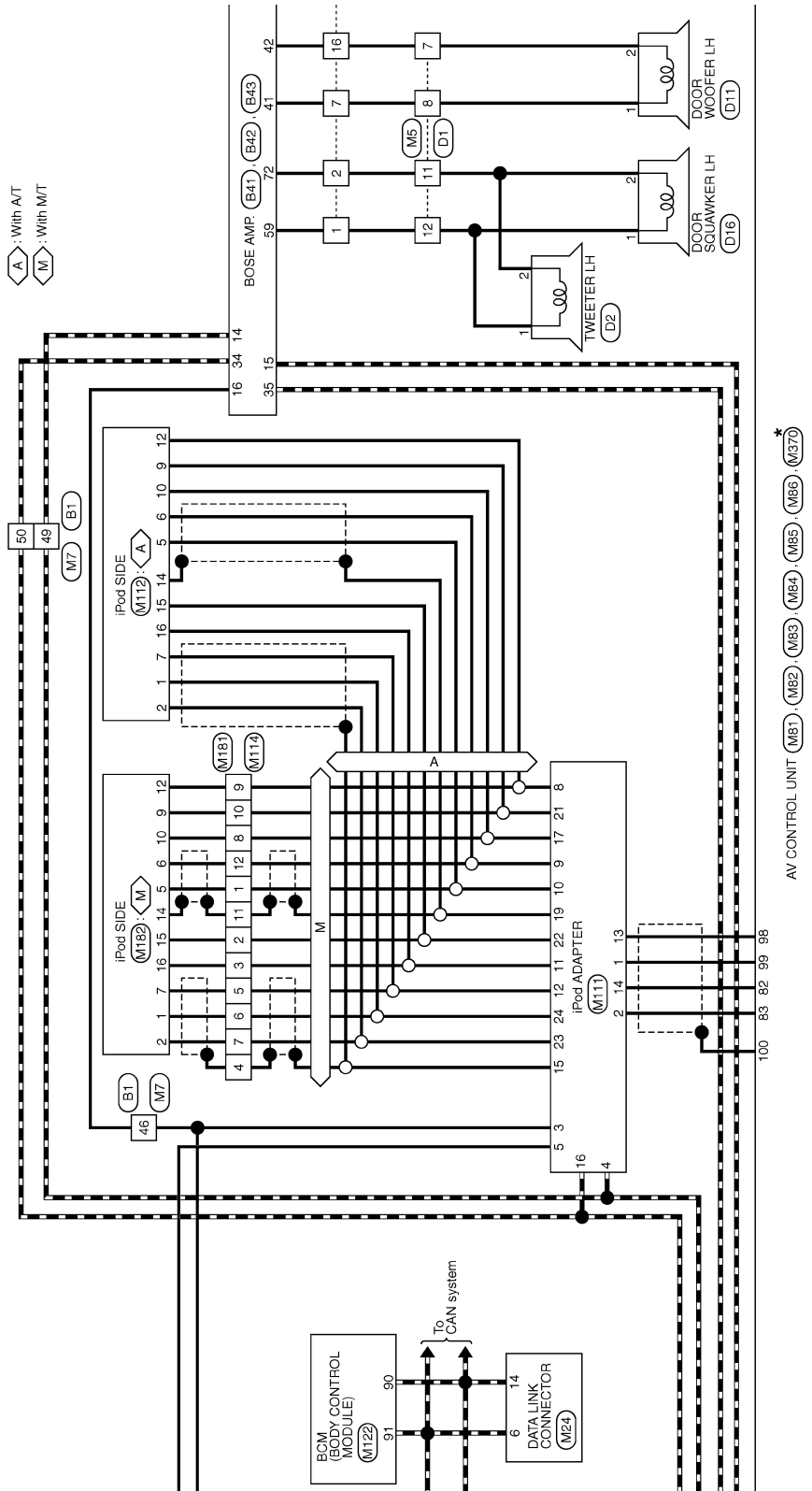
JCNWA2414GB



# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]



\*: This connector is not shown in "Harness Layout".

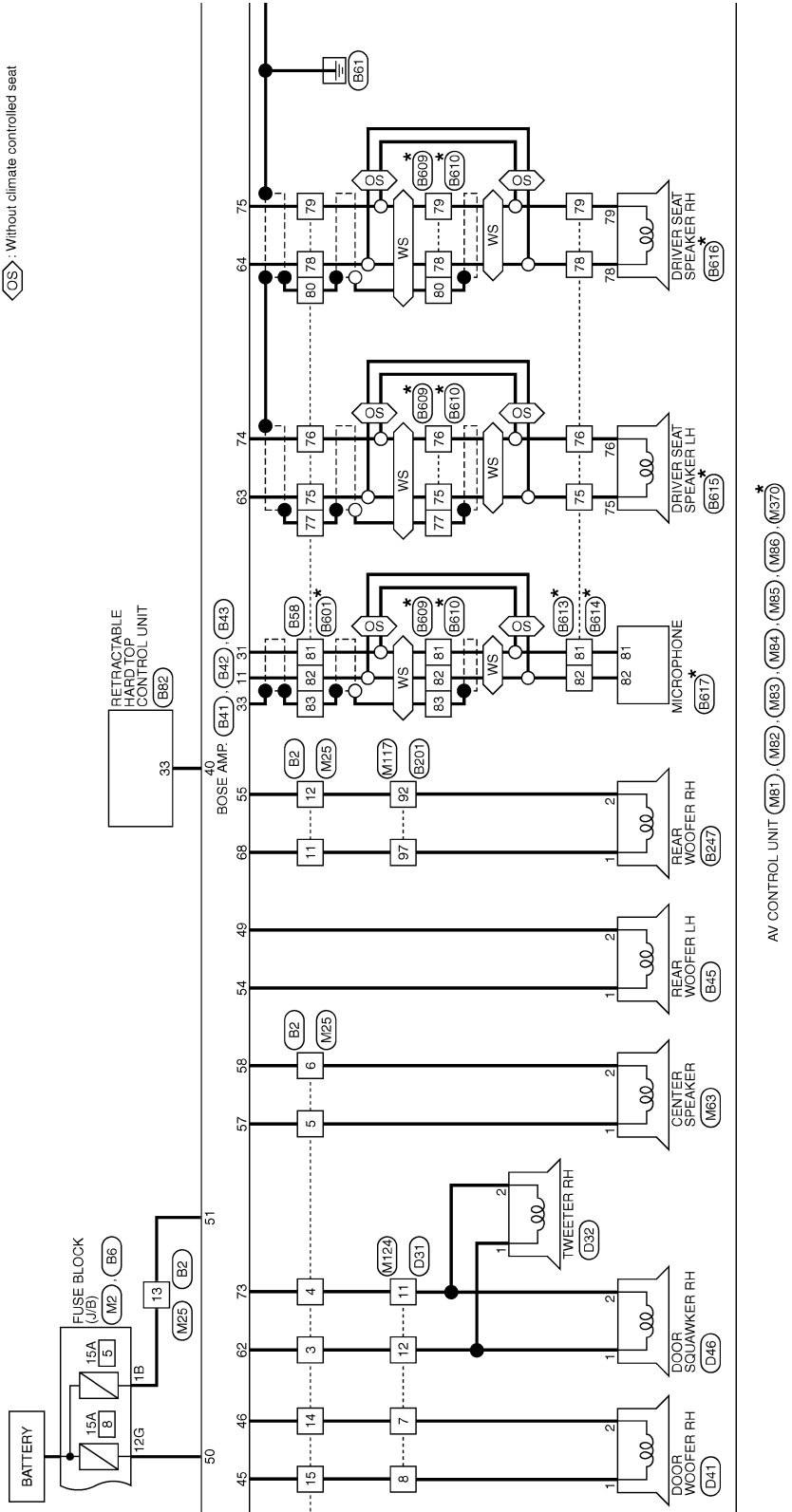
A  
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# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

WS : With climate controlled seat  
OS : Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

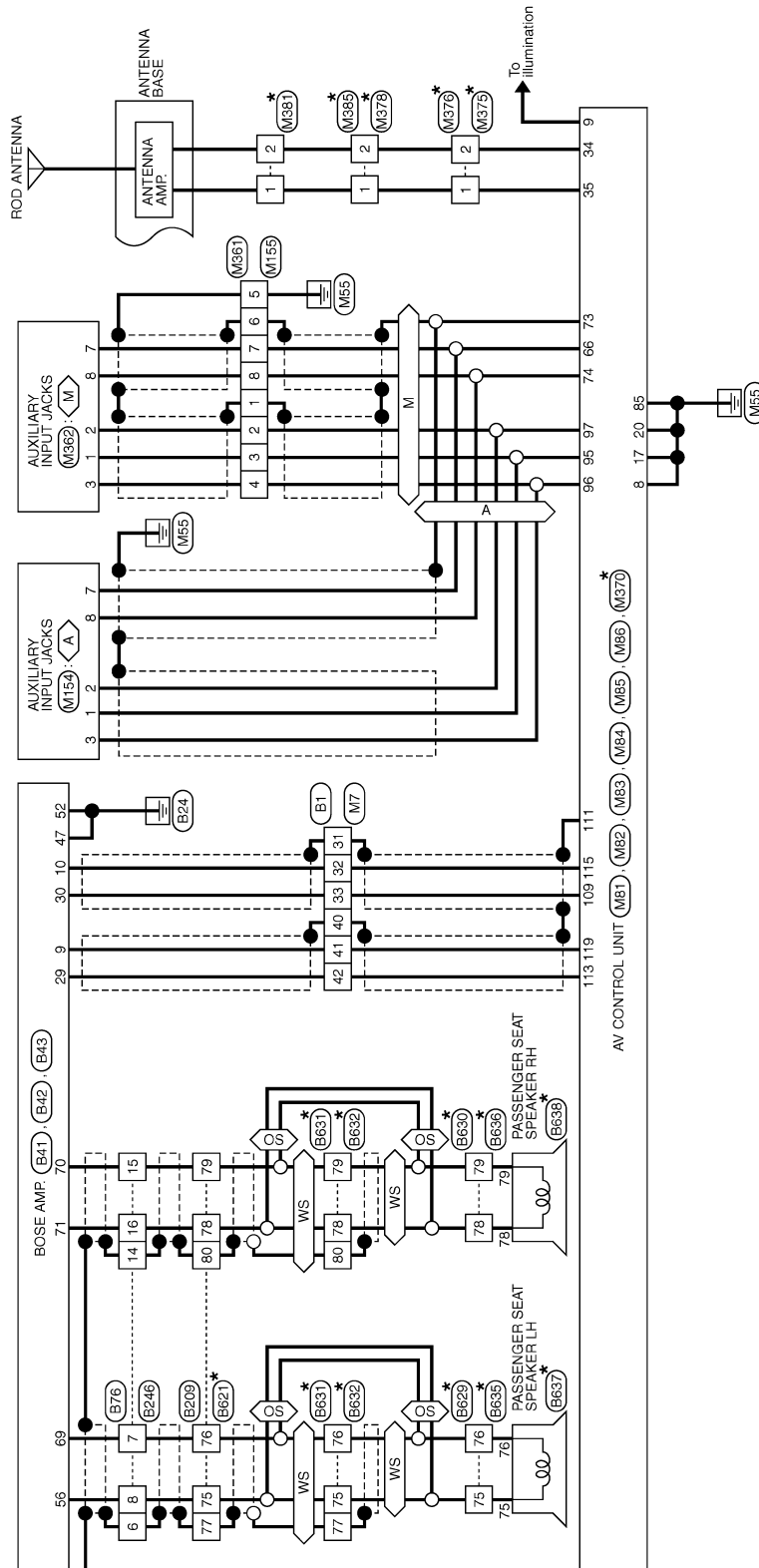
JCNWA2416GB

# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

- A** : With A/T
- M** : With M/T
- WS** : With climate controlled seat
- OS** : Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

JCNWA2417GB

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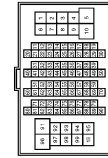
# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH0DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
46	W	-
49	R	- [With BOSE system]
50	G	- [With BOSE system]
57	V	-
61	O	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-

15	G
16	W

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12G	Y	-

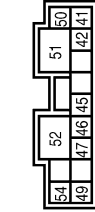
Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	P01FB-A



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

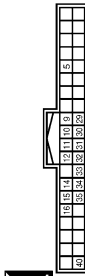
35	L
40	V

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SSA12FBR-SJA2



Terminal No.	Color of Wire	Signal Name [Specification]
41	B	SOUND SIGNAL DOOR WOOFER LH (+)
42	W	SOUND SIGNAL DOOR WOOFER LH (-)
45	G	SOUND SIGNAL DOOR WOOFER RH (+)
46	R	SOUND SIGNAL DOOR WOOFER RH (-)
47	B	GND
49	P	SOUND SIGNAL WOOFER REAR LH (-)
50	Y	BATTERY
51	GR	BATTERY
52	B	GND
54	L	SOUND SIGNAL WOOFER REAR LH (+)

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	TH0DFW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
9	L	SOUND SIGNAL LH (-)
10	G	SOUND SIGNAL RH (-)
11	G	MICROPHONE SIGNAL (-)
14	R	AV COMM (L)
15	P	AV COMM (L)
16	W	ACC
29	P	SOUND SIGNAL LH (+)
30	R	SOUND SIGNAL RH (+)
31	Y	MICROPHONE SIGNAL (+)
33	SHIELD	SHIELD
34	G	AV COMM (H)

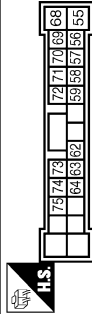
# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

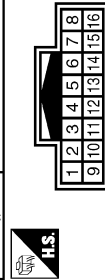
Connector No.	B43
Connector Name	BOSE AMP.
Connector Type	SCA1PBR-SG44



71	Y	SOUND SIGNAL FR RH HEADREST RH (+)
72	W	SOUND SIGNAL FR LH HEADREST LH (-)
73	LG	SOUND SIGNAL FRONT RH (-)
74	Y	SOUND SIGNAL FR LH HEADREST LH (-)
75	B	SOUND SIGNAL FR LH HEADREST RH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
55	O	SOUND SIGNAL WOOFER REAR RH (-)
56	W	SOUND SIGNAL FR RH HEADREST LH (+)
57	O	SOUND SIGNAL CENTER (+)
58	P	SOUND SIGNAL FRONT LH (-)
59	L	SOUND SIGNAL FRONT RH (+)
62	V	SOUND SIGNAL FR LH HEADREST LH (+)
63	G	SOUND SIGNAL FR LH HEADREST RH (+)
64	W	SOUND SIGNAL FR LH HEADREST RH (+)
68	LG	SOUND SIGNAL WOOFER REAR RH (+)
69	B	SOUND SIGNAL FR RH HEADREST LH (-)
70	G	SOUND SIGNAL FR RH HEADREST RH (-)

Connector No.	B76
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

Connector No.	B45
Connector Name	REAR WOOFER LH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH08MF-NH



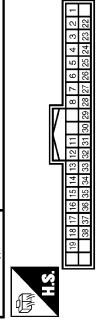
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	SHIELD	-

Connector No.	B88
Connector Name	WIRE TO WIRE
Connector Type	NS10PBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	G	-
76	Y	-
77	SHIELD	-
78	W	-
79	B	-
80	SHIELD	-
81	Y	-
82	G	-
83	SHIELD	-

Connector No.	B82
Connector Name	RETRACTABLE HARD TOP CONTROL UNIT
Connector Type	TH46PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
33	V	ROOF STATUS SIGNAL (AUDIO)

JCNWA2419GB

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

AV

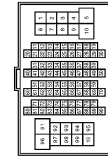
# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
40	GR	-
41	LG	-
42	O	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	G	-
48	Y	-
49	SHIELD	-
50	P	-

Connector No.	B236
Connector Name	SATELLITE RADIO TUNER
Connector Type	A16FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	Y	REQUEST (SAT->CONT)
9	O	COMM (SAT->CONT)
10	BR	COMM (CONT->SAT)
12	SB	BATTERY
15	B	GND

Connector No.	B209
Connector Name	WIRE TO WIRE
Connector Type	NS16FER-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	W	-
76	B	-
77	SHIELD	-
78	Y	-
79	G	-
80	SHIELD	-

Connector No.	B237
Connector Name	TEL ADAPTER UNIT
Connector Type	TH82FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BATTERY
2	LG	ACC
3	O	IGNITION
4	B	GND
5	SHIELD	SHIELD
6	SHIELD	SHIELD
7	B	MICROPHONE SIGNAL
8	R	MICROPHONE GND
9	Y	TEL VOICE SIGNAL (+)
10	G	TEL VOICE SIGNAL (-)
14	B	GND

19	B	GND
20	B	CONTROL SIGNAL
22	B	CONTROL SIGNAL
23	B	CONTROL SIGNAL
24	B	CONTROL SIGNAL
28	P	VEHICLE SPEED (8-PULSE)
29	W	MICROPHONE VCC

16	Y	ACC
----	---	-----

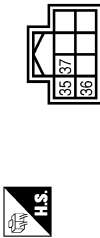
# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

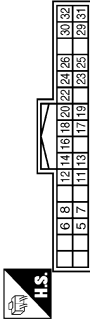
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	E238
Connector Name	TEL ADAPTER UNIT
Connector Type	TH8BFW-NH



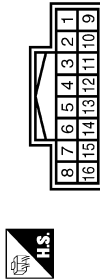
Terminal No.	Color of Wire	Signal Name [Specification]
35	L	AV COMM (H)
36	P	AV COMM (L)

Connector No.	E241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

Connector No.	E246
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	OR	SENSOR SIGNAL 3
26	Y	VEHICLE SPEED (3-PULSE)
28	SB	ACC
30	B	GND
31	B	BATTERY
32	Y	BATTERY

Connector No.	E247
Connector Name	REAR WOOFER RH
Connector Type	NS32FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	E249
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

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A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

AV

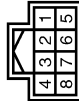
# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B309
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	Y	-
4	SHIELD	-

Connector No.	B311
Connector Name	REAR VIEW CAMERA
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	CAMERA ON SIGNAL
2	W	GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	B471
Connector Name	TEL ADAPTER UNIT
Connector Type	GT16C-1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
33	-	TEL ANTENNA
34	SHIELD	SHIELD

Connector No.	B472
Connector Name	TEL ANTENNA
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	SHIELD	-

Connector No.	B482
Connector Name	SATELLITE RADIO TUNER
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
33	-	SATELLITE ANTENNA
34	SHIELD	SHIELD

Connector No.	B483
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
3	-	-
4	SHIELD	-

Connector No.	B601
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B609
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-



# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B610
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B614
Connector Name	WIRE TO WIRE
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-
78	-	-
79	-	-
81	-	-
82	-	-

Connector No.	B613
Connector Name	WIRE TO WIRE
Connector Type	A08MW



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
78	R	-
79	G	-
81	B	-
82	W	-

Connector No.	B615
Connector Name	DRIVER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B616
Connector Name	DRIVER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B621
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B629
Connector Name	WIRE TO WIRE
Connector Type	TK02MGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-

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A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B630
Connector Name	WIRE TO WIRE
Connector Type	TK02AW



Terminal No.	Color of Wire	Signal Name [Specification]
78	R	-
79	G	-

Connector No.	B631
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B632
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B635
Connector Name	WIRE TO WIRE
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
76	-	-

Connector No.	B636
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B637
Connector Name	PASSENGER SEAT SPEAKER LH
Connector Type	TK02FGY



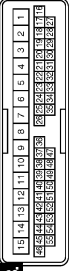
Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B638
Connector Name	PASSENGER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40PW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	W	-
12	L	-








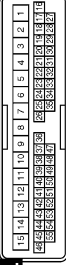








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# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

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Connector No.	D2																							
Connector Name	TWEETER LH																							
Connector Type	TK02MBF-P																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D11</td></tr> <tr><td>Connector Name</td><td>DOOR WOOFER LH</td></tr> <tr><td>Connector Type</td><td>NS02FW-CS</td></tr> </table>  	Connector No.	D11	Connector Name	DOOR WOOFER LH	Connector Type	NS02FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>G</td><td>R</td></tr> </table>	Terminal No.	1	2	Color of Wire	G	R	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D11																							
Connector Name	DOOR WOOFER LH																							
Connector Type	NS02FW-CS																							
Terminal No.	1	2																						
Color of Wire	G	R																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D16</td></tr> <tr><td>Connector Name</td><td>DOOR SQUAWKER LH</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table>  	Connector No.	D16	Connector Name	DOOR SQUAWKER LH	Connector Type	TK02FBR	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D16																							
Connector Name	DOOR SQUAWKER LH																							
Connector Type	TK02FBR																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D31</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40FW-CS15</td></tr> </table>  	Connector No.	D31	Connector Name	WIRE TO WIRE	Connector Type	TH40FW-CS15	<table border="1"> <tr><td>Terminal No.</td><td>7</td><td>8</td><td>11</td><td>12</td></tr> <tr><td>Color of Wire</td><td>R</td><td>G</td><td>W</td><td>L</td></tr> </table>	Terminal No.	7	8	11	12	Color of Wire	R	G	W	L	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]					
Connector No.	D31																							
Connector Name	WIRE TO WIRE																							
Connector Type	TH40FW-CS15																							
Terminal No.	7	8	11	12																				
Color of Wire	R	G	W	L																				
Signal Name [Specification]																								
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Connector No.	D32																							
Connector Name	TWEETER RH																							
Connector Type	TK02MBF-P																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D41</td></tr> <tr><td>Connector Name</td><td>DOOR WOOFER RH</td></tr> <tr><td>Connector Type</td><td>NS02FW-CS</td></tr> </table>  	Connector No.	D41	Connector Name	DOOR WOOFER RH	Connector Type	NS02FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>G</td><td>R</td></tr> </table>	Terminal No.	1	2	Color of Wire	G	R	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D41																							
Connector Name	DOOR WOOFER RH																							
Connector Type	NS02FW-CS																							
Terminal No.	1	2																						
Color of Wire	G	R																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D46</td></tr> <tr><td>Connector Name</td><td>DOOR SQUAWKER RH</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table>  	Connector No.	D46	Connector Name	DOOR SQUAWKER RH	Connector Type	TK02FBR	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D46																							
Connector Name	DOOR SQUAWKER RH																							
Connector Type	TK02FBR																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>E5</td></tr> <tr><td>Connector Name</td><td>POWER DISTRIBUTION MODULE</td></tr> <tr><td>Connector Type</td><td>TH20FW-CS12-M4-1V</td></tr> </table>  	Connector No.	E5	Connector Name	POWER DISTRIBUTION MODULE	Connector Type	TH20FW-CS12-M4-1V	<table border="1"> <tr><td>Terminal No.</td><td>25</td></tr> <tr><td>Color of Wire</td><td>G</td></tr> </table>	Terminal No.	25	Color of Wire	G	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]											
Connector No.	E5																							
Connector Name	POWER DISTRIBUTION MODULE																							
Connector Type	TH20FW-CS12-M4-1V																							
Terminal No.	25																							
Color of Wire	G																							
Signal Name [Specification]																								

A  
B  
C  
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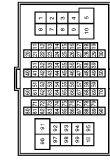
# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-MS10-TM4



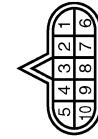
Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	
68	W	
88	O	

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH (WITH A/T)
Connector Type	TB01FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



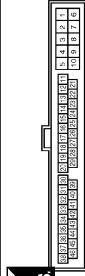
Terminal No.	Color of Wire	Signal Name [Specification]
7	R	

Connector No.	F55
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02EB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	O	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-MS10



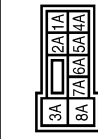
Terminal No.	Color of Wire	Signal Name [Specification]
30	R	
31	R	
41	O	

Connector No.	F157
Connector Name	TOM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG



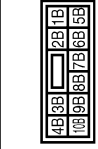
Terminal No.	Color of Wire	Signal Name [Specification]
7	L	REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS30FW-M2



Terminal No.	Color of Wire	Signal Name [Specification]
ZA	G	
5A	L	

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1B	V	[Without NAV]

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# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



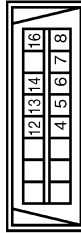
Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
46	SB	- [Without NAVI]
49	R	- [With BOSE system]
50	G	- [With BOSE system]
57	O	-
61	O	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS16-TM4



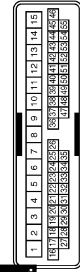
Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
69	G	-
89	O	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MM-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	W	-
8	B	-
11	W	-
12	L	-

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MM



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12C	R	-

Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

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A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# TEL ADAPTER UNIT

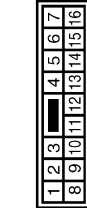
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[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

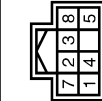
15	G	-
16	W	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	SB	-
5	Y	-
6	LG	-
7	B	-
11	L	-
12	P	-
13	V	-
14	R	- [Without NAV]

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



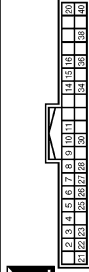
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M29
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40PW-NH



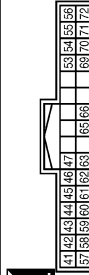
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

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# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

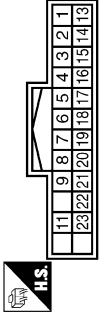
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Connector No.	M68
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS2FL-M2-LC



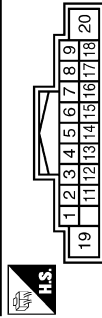
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	O	ACC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
11	P	COMM (CONT->DISP)
13	BR	INVERTER GND

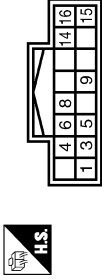
Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-GS2



Terminal No.	Color of Wire	Signal Name [Specification]
6	P	STRG SW A
7	V	ACC
8	B	GND
9	L	ILLUMINATION
15	B	STRG SW GND
16	L	STRG SW B
17	B	GND
18	Y	BATTERY
20	B	GND

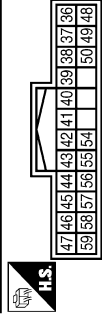
14	LG	SIGNAL GND
15	SR	COMPOSITE IMAGE SIGNAL
16	BR	COMPOSITE SYNC
17	G	RGB (R-RED) SIGNAL
18	P	RGB (B-BLUE) SIGNAL
19	W	RGB SYNC
20	G	VP
21	SHIELD	SHIELD
22	L	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



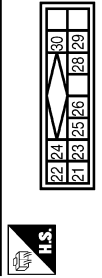
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	ACC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (BLUE) SIGNAL
39	L	RGB (GREEN) SIGNAL
40	G	RGB (R-RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (YS) SIGNAL
44	L	COMM (DISP->CONT)
45	R	HP
46	LG	SIGNAL GND

Connector No.	M82
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	A12FW



Terminal No.	Color of Wire	Signal Name [Specification]
21	W	SOUND SIGNAL LH (-)
22	B	SOUND SIGNAL LH (+)
23	R	SOUND SIGNAL RH (-)
24	G	SOUND SIGNAL RH (+)
25	SHIELD	SHIELD
26	SHIELD	SHIELD
28	P	REQUEST (SAT->CONT)
29	G	COMM (SAT->CONT)
30	L	COMM (CONT->SAT)

# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

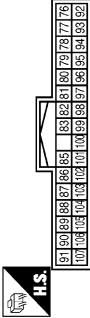
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	GR	CAMERA CONNECTION RECOGNITION
73	B	SHIELD
74	R	AUX IMAGE GND

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
79	P	TEL VOICE SIGNAL (-)
80	L	TEL VOICE SIGNAL (+)
81	SHIELD	SHIELD
82	G	iPod SOUND SIGNAL RH (-)
83	B	iPod SOUND SIGNAL RH (+)
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	G	AV COMM (H) [With BOSE system]
89	R	AV COMM (L) [With BOSE system]
90	SB	AV COMM (H) [With BOSE system]

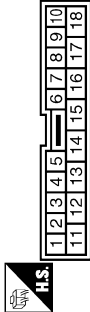
Terminal No.	Color of Wire	Signal Name [Specification]
91	Y	AV COMM (L) [With BOSE system]
95	R	AUX SOUND SIGNAL RH (+)
96	W	AUX SOUND SIGNAL LH (+)
97	B	AUX SOUND SIGNAL GND
98	W	iPod SOUND SIGNAL LH (-)
99	R	iPod SOUND SIGNAL LH (+)
100	SHIELD	SHIELD
101	BR	SW GND
103	SB	DISK EJECT SIGNAL
104	G	IGNITION
105	O	REVERSE
106	SB	PARKING BRAKE
107	GR	VEHICLE SPEED (3-PULSE)

Connector No.	M86
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH12FW-NH



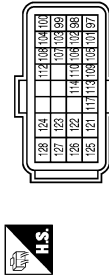
Terminal No.	Color of Wire	Signal Name [Specification]
109	R	SOUND SIGNAL RH (+)
111	B	SHIELD
113	P	SOUND SIGNAL LH (-)
115	G	SOUND SIGNAL RH (-)
119	L	SOUND SIGNAL LH (-)

Connector No.	M106
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	- [Without NAVI]
2	W	- [Without NAVI]
3	R	- [Without NAVI]

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-R26-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod ADAPTER->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTIFY
12	W	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
14	C	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	R	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)



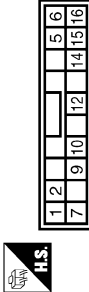
# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M112
Connector Name	iPod SIDE (WITH A-7)
Connector Type	IP18FY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M114
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



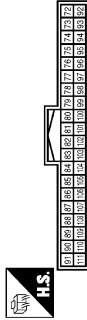
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	O	-
4	SHIELD	-
5	W	-
6	B	-
7	R	-
8	BR	-
9	W	-
10	W	-
11	SHIELD	-

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
40	Y	-
41	G	-
42	LG	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	P	-
48	I	-
49	SHIELD	-
50	V	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



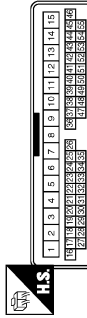
Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TH38MW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	SB	-
12	BR	-

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

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# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

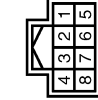
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)
Connector Type	A08FW



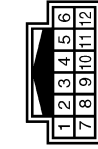
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M155
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	B	
6	SHIELD	
7	G	
8	R	

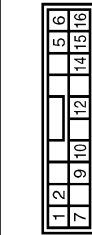
Connector No.	M181
Connector Name	WIRE TO WIRE
Connector Type	TH12MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	G	
3	O	
4	SHIELD	
5	W	
6	B	
7	R	
8	BR	
9	W	
10	L	
11	SHIELD	

12	P
----	---

Connector No.	M182
Connector Name	iPod SIDE (WITH M/T)
Connector Type	IP18FGY



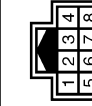
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	L	iPod CONNECTION RECOGNITION GND
10	BR	CHARGE POWER
12	W	SHIELD
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTITY

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



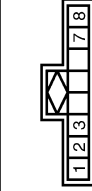
Terminal No.	Color of Wire	Signal Name [Specification]
14	-	
15	-	
17	-	

Connector No.	M361
Connector Name	WIRE TO WIRE
Connector Type	TH08MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	SHIELD	
6	SHIELD	
7	G	
8	R	

Connector No.	M362
Connector Name	AUXILIARY INPUT JACKS (WITH M/T)
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

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# TEL ADAPTER UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M370
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	GT13SH-2 /S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
34	-	AM-FM MAIN
35	-	ANTENNA AMP_ON SIGNAL

Connector No.	M375
Connector Name	WIRE TO WIRE
Connector Type	GT13SSH-1 /IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M376
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1 /S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M378
Connector Name	WIRE TO WIRE
Connector Type	GT13SSN-1 /IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	M381
Connector Name	ANTENNA BASE
Connector Type	GT13SSN-1 /IPP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	ANTENNA AMP_ON SIGNAL
2	-	AM-FM MAIN

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1 /S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NSS



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	- [Without NAVI]
2	W	- [Without NAVI]
3	SHIELD	-

Connector No.	R7
Connector Name	MICROPHONE
Connector Type	TK04FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	MICROPHONE SIGNAL [Without NAVI]
2	SHIELD	MICROPHONE GND
4	G	MICROPHONE VCC [Without NAVI]

A  
B  
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D  
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L  
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AV  
O  
P

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

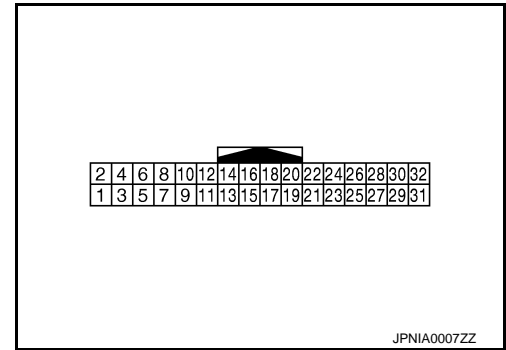
[BOSE AUDIO WITHOUT NAVIGATION]

## CAMERA CONTROL UNIT

Reference Value

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TERMINAL LAYOUT



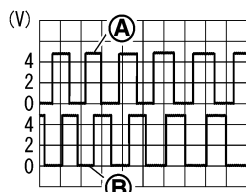
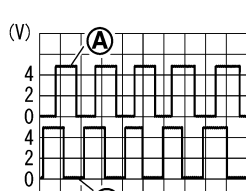
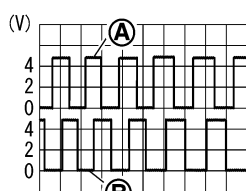
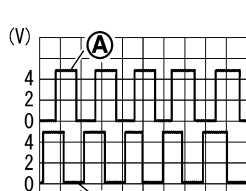
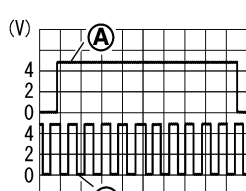
PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
5	—	Shield	—	—	—	—
6 (B)	Ground	Camera image signal	Input	Ignition switch ON	At rear view camera image is displayed.	
7 (W)	Ground	Ground	—	Ignition switch ON	—	0 V
8 (R)	Ground	Camera power supply	Output	Ignition switch ON	R position	6.0 V
					Other than R position	0 V
11	—	Shield	—	—	—	—
12 (W)	Ground	Camera image signal	Output	Ignition switch ON	At rear view camera image is displayed.	
14 (GR)	Ground	Camera connection recog- nition signal	Output	Ignition switch ON	Connected to camera con- trol unit connector.	0 V
					Not connected to camera control unit connector.	5.0 V
17 (P)	—	AV communication signal (L)	Input/ Output	—	—	—
18 (L)	—	AV communication signal (H)	Input/ Output	—	—	—
19 (R)	—	AV communication signal (L)	Input/ Output	—	—	—

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
20 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
22 (GR)	Ground	Reverse signal	Input	Ignition switch ON	R position	12.0 V
				Ignition switch ON	Other than R position	0 V
23 (L)	Ground	Sensor signal 1	Input	Ignition switch ON	Turn the steering to the right.	 <p style="text-align: right; font-size: small;">SKIB3827E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
					Turn the steering to the left.	 <p style="text-align: right; font-size: small;">SKIB3828E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
24 (BR)	Ground	Sensor signal 2	Input	Ignition switch ON	Turn the steering to the right.	 <p style="text-align: right; font-size: small;">SKIB3827E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
					Turn the steering to the left.	 <p style="text-align: right; font-size: small;">SKIB3828E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
25 (O)	Ground	Sensor signal 3	Input	Ignition switch ON	Turn the steering around the neutral position.	 <p style="text-align: right; font-size: small;">SKIB3829E</p> <p style="text-align: center;">A: Sensor signal 3 B: Sensor signal 1</p>

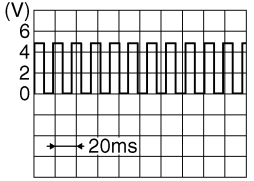
A  
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L  
M  
O  
P

AV

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
26 (V)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is ap- prox. 40 km/h (25 MPH)	<p><b>NOTE:</b> Maximum voltage may be 12.0 V due to specifications (connected units).</p>  <p style="text-align: right; font-size: small;">SKIA6649J</p>
30 (SB)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
31 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
32 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage

## Wiring Diagram - BOSE AUDIO WITHOUT NAVIGATION SYSTEM -

INFOID:000000004929175

**NOTE:**

# CAMERA CONTROL UNIT

[BOSE AUDIO WITHOUT NAVIGATION]

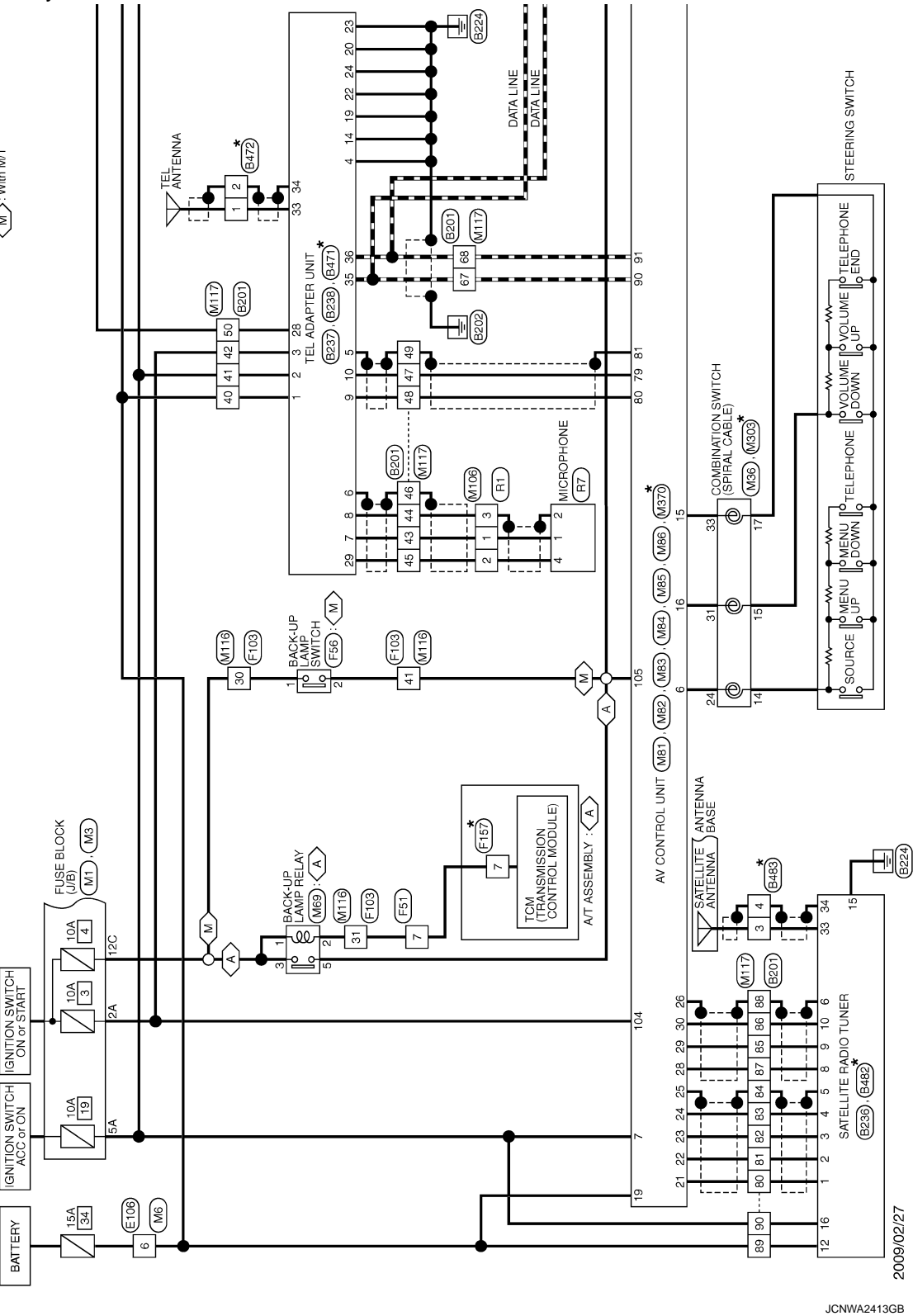
< ECU DIAGNOSIS INFORMATION >

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

⬠: With A/T  
⬢: With M/T

\*: This connector is not shown in "Harness Layout".



2009/02/27

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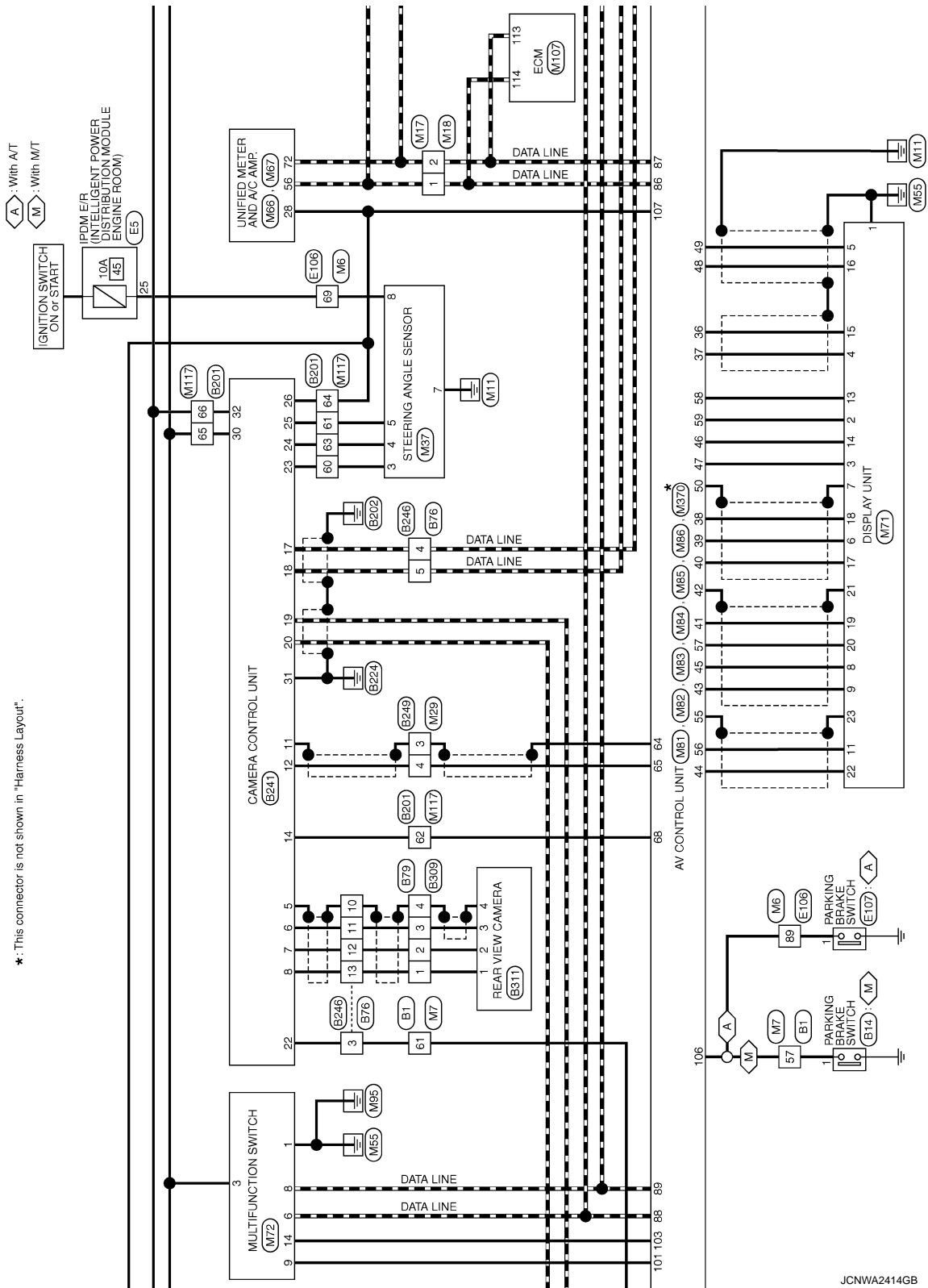
A  
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P

AV

# CAMERA CONTROL UNIT

[BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >



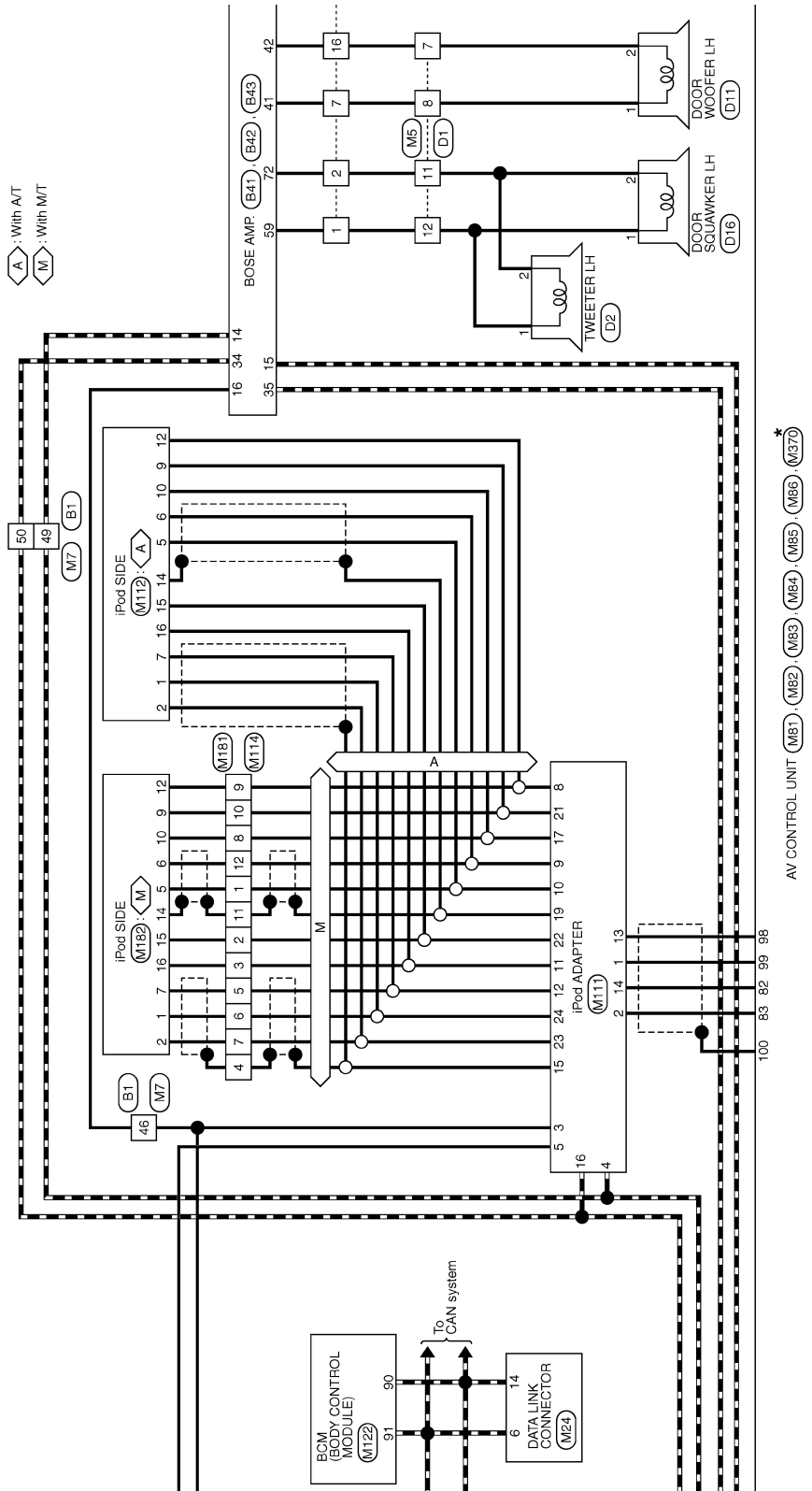
JCNWA2414GB



# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]



\*: This connector is not shown in "Harness Layout".

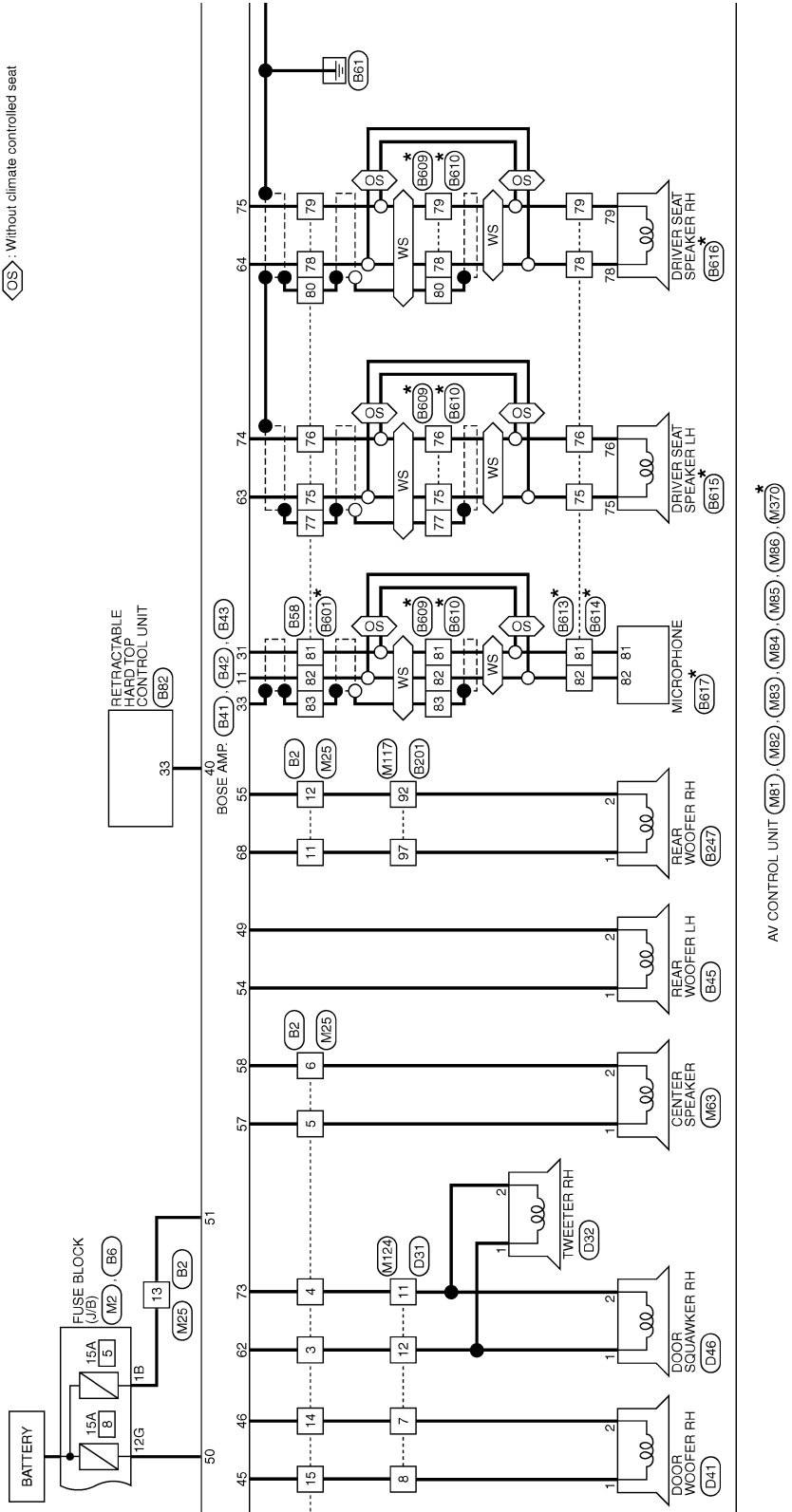
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

WS: With climate controlled seat  
 OS: Without climate controlled seat







\*: This connector is not shown in "Harness Layout".

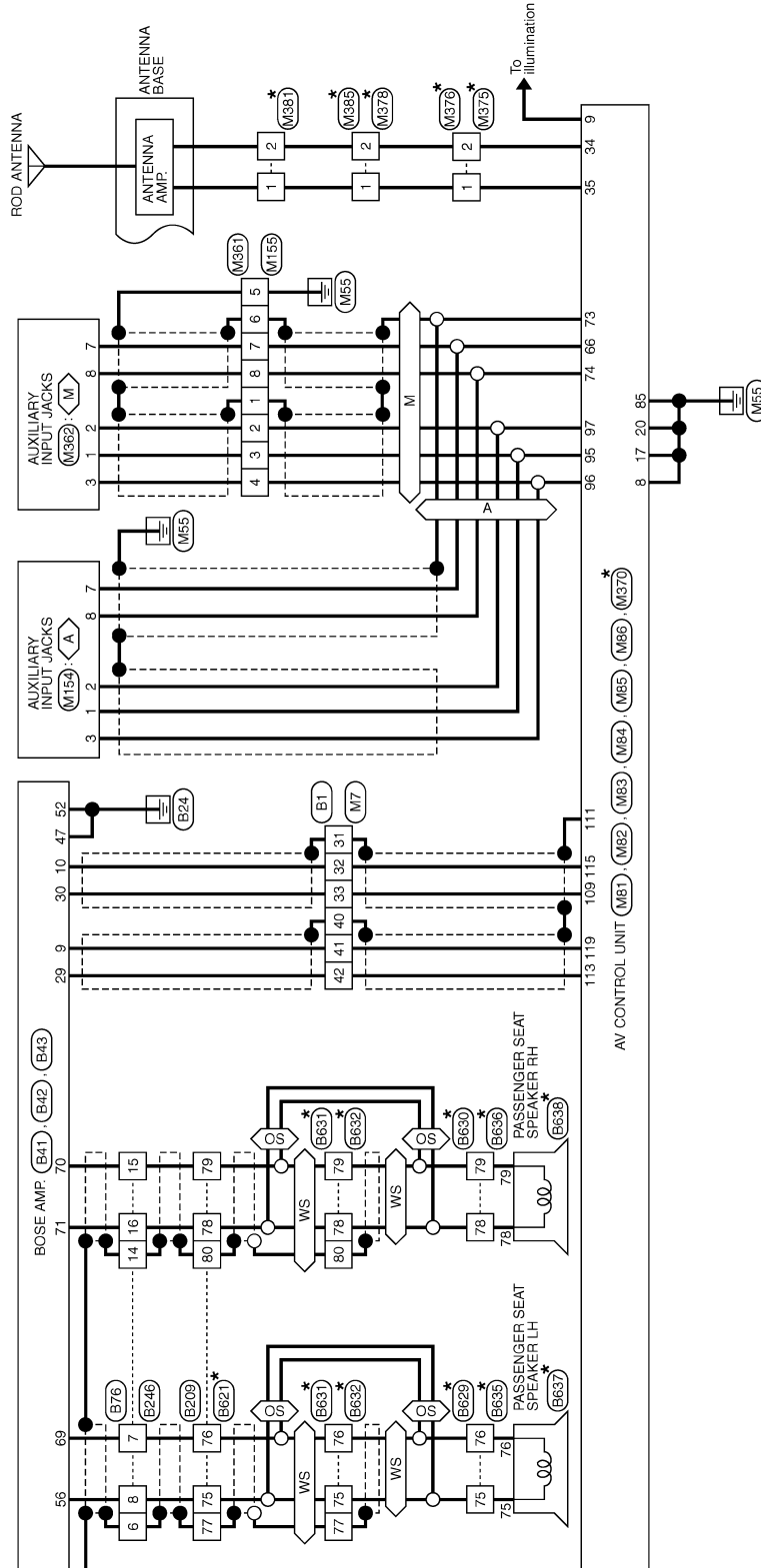
JCNWA2416GB

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

-  A : With A/T
-  M : With M/T
-  WS : With climate controlled seat
-  OS : Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

JCNWA2417GB

A  
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AV

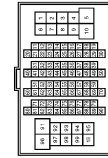
# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH0DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
46	W	-
49	R	- [With BOSE system]
50	G	- [With BOSE system]
57	V	-
61	O	-



Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	P01FB-A



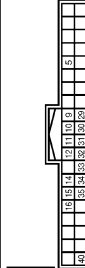
Terminal No.	1	V	-
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Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	TH0DFW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
9	L	SOUND SIGNAL LH (-)
10	G	SOUND SIGNAL RH (-)
11	G	MICROPHONE SIGNAL (-)
14	R	AV COMM (L)
15	P	AV COMM (L)
16	W	ACC
29	P	SOUND SIGNAL LH (+)
30	R	SOUND SIGNAL RH (+)
31	V	MICROPHONE SIGNAL (+)
33	SHIELD	SHIELD
34	G	AV COMM (H)

15	G	-
16	W	-

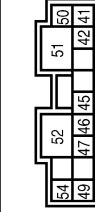
Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
12G	Y	-

35	L	AV COMM (H)
40	V	ROOF STATUS SIGNAL (AUDIO)

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SSA12FBR-SJA2



Terminal No.	Color of Wire	Signal Name [Specification]
41	B	SOUND SIGNAL DOOR WOOFER LH (+)
42	W	SOUND SIGNAL DOOR WOOFER LH (-)
45	G	SOUND SIGNAL DOOR WOOFER RH (+)
46	R	SOUND SIGNAL DOOR WOOFER RH (-)
47	B	GND
49	P	SOUND SIGNAL WOOFER REAR LH (-)
50	Y	BATTERY
51	GR	BATTERY
52	GR	GND
54	L	SOUND SIGNAL WOOFER REAR LH (+)

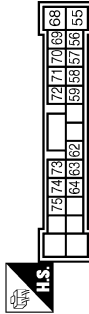
# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B43
Connector Name	BOSE AMP.
Connector Type	SCA1PBR-SG44



71	Y	SOUND SIGNAL FR RH HEADREST RH (+)
72	W	SOUND SIGNAL FRONT LH (-)
73	LG	SOUND SIGNAL FRONT RH (-)
74	Y	SOUND SIGNAL FR LH HEADREST LH (-)
75	B	SOUND SIGNAL FR LH HEADREST RH (-)



Connector No.	B45
Connector Name	REAR WOOFER LH
Connector Type	NS02FW-CS



Connector No.	B58
Connector Name	WIRE TO WIRE
Connector Type	NS10PBR-CS

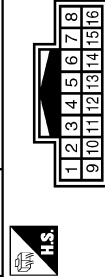


Terminal No.	Color of Wire	Signal Name [Specification]
55	O	SOUND SIGNAL WOOFER REAR RH (-)
56	W	SOUND SIGNAL FR RH HEADREST LH (+)
57	O	SOUND SIGNAL CENTER (+)
58	P	SOUND SIGNAL FRONT (-)
59	L	SOUND SIGNAL FRONT LH (+)
62	V	SOUND SIGNAL FRONT RH (+)
63	G	SOUND SIGNAL FR LH HEADREST LH (+)
64	W	SOUND SIGNAL FR LH HEADREST RH (+)
68	LG	SOUND SIGNAL WOOFER REAR RH (+)
69	B	SOUND SIGNAL FR RH HEADREST LH (-)
70	G	SOUND SIGNAL FR RH HEADREST RH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

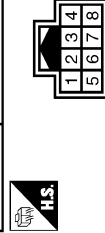
Terminal No.	Color of Wire	Signal Name [Specification]
75	G	-
76	Y	-
77	SHIELD	-
78	W	-
79	B	-
80	SHIELD	-
81	Y	-
82	G	-
83	SHIELD	-

Connector No.	B76
Connector Name	WIRE TO WIRE
Connector Type	TH16MW-NH

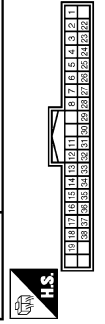


15	G	-
16	Y	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH08MMF-NH



Connector No.	B82
Connector Name	RETRACTABLE HARD TOP CONTROL UNIT
Connector Type	TH46PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	SHIELD	-

Terminal No.	33
Color of Wire	V
Signal Name [Specification]	ROOF STATUS SIGNAL (AUDIO)

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A  
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AV

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

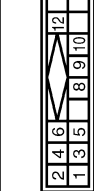
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	THBDFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
40	GR	-
41	LG	-
42	O	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	G	-
48	Y	-
49	SHIELD	-
50	P	-

Connector No.	B236
Connector Name	SATELLITE RADIO TUNER
Connector Type	A16FW



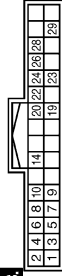
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	SOUND SIGNAL LH (-)
2	R	SOUND SIGNAL LH (+)
3	W	SOUND SIGNAL RH (-)
4	B	SOUND SIGNAL RH (+)
5	SHIELD	SHIELD
6	SHIELD	SHIELD
8	Y	REQUEST (SAT->CONT)
9	O	COMM (SAT->CONT)
10	BR	COMM (CONT->SAT)
12	SB	BATTERY
15	B	GND

Connector No.	B209
Connector Name	WIRE TO WIRE
Connector Type	NS16FER-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	W	-
76	B	-
77	SHIELD	-
78	Y	-
79	G	-
80	SHIELD	-

Connector No.	B237
Connector Name	TEL ADAPTER UNIT
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BATTERY
2	LG	ACC
3	O	IGNITION
4	B	GND
5	SHIELD	SHIELD
6	SHIELD	SHIELD
7	B	MICROPHONE SIGNAL
8	R	MICROPHONE GND
9	Y	TEL VOICE SIGNAL (+)
10	G	TEL VOICE SIGNAL (-)
14	B	GND

19	B	GND
20	B	CONTROL SIGNAL
22	B	CONTROL SIGNAL
23	B	CONTROL SIGNAL
24	B	CONTROL SIGNAL
28	P	VEHICLE SPEED (8-PULSE)
29	W	MICROPHONE VCC

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	E238
Connector Name	TEL ADAPTER UNIT
Connector Type	TH8BFW-NH



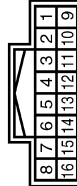
Terminal No.	Color of Wire	Signal Name [Specification]
35	L	AV COMM (H)
36	P	AV COMM (L)

Connector No.	E241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (H)
18	L	AV COMM (H)
19	R	AV COMM (L)
20	G	AV COMM (H)

Connector No.	E246
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	OR	SENSOR SIGNAL 3
26	Y	VEHICLE SPEED (3-PULSE)
30	SR	ACC
31	B	GND
32	Y	BATTERY

Connector No.	E247
Connector Name	REAR WOOFER RH
Connector Type	NS32FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	E249
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

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P

AV

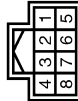
# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B309
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	—
2	W	—
3	Y	—
4	SHIELD	—

Connector No.	B311
Connector Name	REAR VIEW CAMERA
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	CAMERA ON SIGNAL
2	W	GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	B471
Connector Name	TEL ADAPTER UNIT
Connector Type	GT16C-1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
33	—	TEL ANTENNA
34	SHIELD	SHIELD

Connector No.	B472
Connector Name	TEL ANTENNA
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	—	—
2	SHIELD	—

Connector No.	B482
Connector Name	SATELLITE RADIO TUNER
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
33	—	SATELLITE ANTENNA
34	SHIELD	SHIELD

Connector No.	B483
Connector Name	ANTENNA BASE
Connector Type	GT16C-1PP-HU



Terminal No.	Color of Wire	Signal Name [Specification]
3	—	—
4	SHIELD	—

Connector No.	B601
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	—
76	L	—
77	B/Y	—
78	R	—
79	G	—
80	B/W	—
81	B	—
82	W	—
83	B/R	—

Connector No.	B609
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	—
76	L	—
77	B/Y	—
78	R	—
79	G	—
80	B/W	—
81	B	—
82	W	—
83	B/R	—



# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B610
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



99	96	98	80	81	82	83		
88	85	104	105	75	76	77	78	79

Connector No.	B614
Connector Name	WIRE TO WIRE
Connector Type	A08FW



75	76	78	79	81	82
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Connector No.	B613
Connector Name	WIRE TO WIRE
Connector Type	A08MW



82	81	79	78	76	75
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Connector No.	B615
Connector Name	DRIVER SEAT SPEAKER LH
Connector Type	TK02FGY



76	75
----	----

Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
78	R	-
79	G	-
81	B	-
82	W	-

Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-
78	-	-
79	-	-
81	-	-
82	-	-

Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B616
Connector Name	DRIVER SEAT SPEAKER RH
Connector Type	TK02FW



79	78
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Connector No.	B617
Connector Name	MICROPHONE
Connector Type	TK02FBR



82	81
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Connector No.	B621
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



95	92	91	78	78			
93	100	90	94	77	75	79	80

Connector No.	B629
Connector Name	WIRE TO WIRE
Connector Type	TK02MGY



75	76
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Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Terminal No.	Color of Wire	Signal Name [Specification]
81	-	-
82	-	-

Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
78	L	-

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# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	B630
Connector Name	WIRE TO WIRE
Connector Type	TK02WW



Terminal No.	Color of Wire	Signal Name [Specification]
78	R	-
79	G	-

Connector No.	B631
Connector Name	WIRE TO WIRE
Connector Type	NS10MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B632
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B635
Connector Name	WIRE TO WIRE
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B636
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B637
Connector Name	PASSENGER SEAT SPEAKER LH
Connector Type	TK02FGY



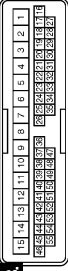
Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B638
Connector Name	PASSENGER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40PW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	W	-
12	L	-








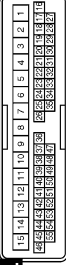







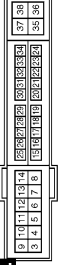
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# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

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Connector No.	D2																							
Connector Name	TWEETER LH																							
Connector Type	TK02MBF-P																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D11</td></tr> <tr><td>Connector Name</td><td>DOOR WOOFER LH</td></tr> <tr><td>Connector Type</td><td>NS02FW-CS</td></tr> </table>  	Connector No.	D11	Connector Name	DOOR WOOFER LH	Connector Type	NS02FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>G</td><td>R</td></tr> </table>	Terminal No.	1	2	Color of Wire	G	R	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D11																							
Connector Name	DOOR WOOFER LH																							
Connector Type	NS02FW-CS																							
Terminal No.	1	2																						
Color of Wire	G	R																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D16</td></tr> <tr><td>Connector Name</td><td>DOOR SQUAWKER LH</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table>  	Connector No.	D16	Connector Name	DOOR SQUAWKER LH	Connector Type	TK02FBR	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D16																							
Connector Name	DOOR SQUAWKER LH																							
Connector Type	TK02FBR																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D31</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40FW-CS15</td></tr> </table>  	Connector No.	D31	Connector Name	WIRE TO WIRE	Connector Type	TH40FW-CS15	<table border="1"> <tr><td>Terminal No.</td><td>7</td><td>8</td><td>11</td><td>12</td></tr> <tr><td>Color of Wire</td><td>R</td><td>G</td><td>W</td><td>L</td></tr> </table>	Terminal No.	7	8	11	12	Color of Wire	R	G	W	L	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]					
Connector No.	D31																							
Connector Name	WIRE TO WIRE																							
Connector Type	TH40FW-CS15																							
Terminal No.	7	8	11	12																				
Color of Wire	R	G	W	L																				
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D32</td></tr> <tr><td>Connector Name</td><td>TWEETER RH</td></tr> <tr><td>Connector Type</td><td>TK02MBF-P</td></tr> </table>  	Connector No.	D32	Connector Name	TWEETER RH	Connector Type	TK02MBF-P	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D32																							
Connector Name	TWEETER RH																							
Connector Type	TK02MBF-P																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D41</td></tr> <tr><td>Connector Name</td><td>DOOR WOOFER RH</td></tr> <tr><td>Connector Type</td><td>NS02FW-CS</td></tr> </table>  	Connector No.	D41	Connector Name	DOOR WOOFER RH	Connector Type	NS02FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>G</td><td>R</td></tr> </table>	Terminal No.	1	2	Color of Wire	G	R	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D41																							
Connector Name	DOOR WOOFER RH																							
Connector Type	NS02FW-CS																							
Terminal No.	1	2																						
Color of Wire	G	R																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>D46</td></tr> <tr><td>Connector Name</td><td>DOOR SQUAWKER RH</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table>  	Connector No.	D46	Connector Name	DOOR SQUAWKER RH	Connector Type	TK02FBR	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]									
Connector No.	D46																							
Connector Name	DOOR SQUAWKER RH																							
Connector Type	TK02FBR																							
Terminal No.	1	2																						
Color of Wire	L	W																						
Signal Name [Specification]																								
<table border="1"> <tr><td>Connector No.</td><td>E5</td></tr> <tr><td>Connector Name</td><td>FOR INTELLIGENT POWER DISTRIBUTION MODULE (PAGES 8-20)</td></tr> <tr><td>Connector Type</td><td>TH20FW-CS12-M4-1V</td></tr> </table>  	Connector No.	E5	Connector Name	FOR INTELLIGENT POWER DISTRIBUTION MODULE (PAGES 8-20)	Connector Type	TH20FW-CS12-M4-1V	<table border="1"> <tr><td>Terminal No.</td><td>25</td></tr> <tr><td>Color of Wire</td><td>G</td></tr> </table>	Terminal No.	25	Color of Wire	G	<table border="1"> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>	Signal Name [Specification]											
Connector No.	E5																							
Connector Name	FOR INTELLIGENT POWER DISTRIBUTION MODULE (PAGES 8-20)																							
Connector Type	TH20FW-CS12-M4-1V																							
Terminal No.	25																							
Color of Wire	G																							
Signal Name [Specification]																								

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# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10-TM4



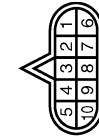
Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	
68	W	
88	O	

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH (WITH A/T)
Connector Type	TB01FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



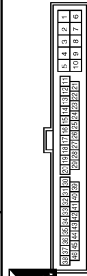
Terminal No.	Color of Wire	Signal Name [Specification]
7	R	

Connector No.	F55
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02EB



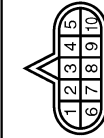
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	O	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10



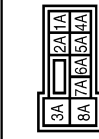
Terminal No.	Color of Wire	Signal Name [Specification]
30	R	
31	R	
41	O	

Connector No.	F157
Connector Name	TOM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG



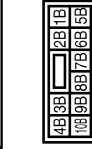
Terminal No.	Color of Wire	Signal Name [Specification]
7	L	REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS30FW-M2



Terminal No.	Color of Wire	Signal Name [Specification]
ZA	G	
5A	L	

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1B	V	

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# CAMERA CONTROL UNIT

[BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No. M3	FUSE BLOCK (J/B)	Connector No. M5	WIRE TO WIRE	Connector No. M6	WIRE TO WIRE	Connector No. M7	WIRE TO WIRE
Connector Name NS12FW-GS		Connector Name TH40MW-CS15		Connector Name TH80MM-CS16-TM4		Connector Name TH80MM-CS16-TM4	
Connector Type H.S.		Connector Type H.S.		Connector Type H.S.		Connector Type H.S.	

Terminal No.	Color of Wire	Signal Name [Specification]
1ZC	R	-

Terminal No.	Color of Wire	Signal Name [Specification]
7	W	-
8	B	-
11	W	-
12	L	-

Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
69	G	-
89	O	-

Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
46	SB	- [Without NAVI]
49	R	- [With BOSE system]
50	G	- [With BOSE system]
57	O	-
61	O	-

Connector No. M17	WIRE TO WIRE	Connector No. M24	DATA LINK CONNECTOR
Connector Name TK02FW		Connector Name BD16FW	
Connector Type H.S.		Connector Type H.S.	

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

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# CAMERA CONTROL UNIT

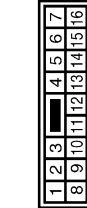
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[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

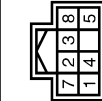
15	G	-
16	W	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



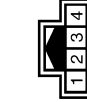
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	SB	-
5	Y	-
6	LG	-
7	B	-
11	L	-
12	P	-
13	V	-
14	R	- [Without NAV]

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



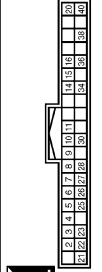
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M29
Connector Name	WIRE TO WIRE
Connector Type	TH04MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40PW-NH



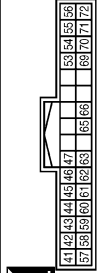
Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (3-PULSE)

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

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# CAMERA CONTROL UNIT

[BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

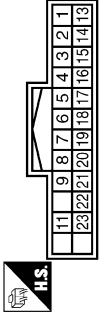
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M68
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS2FL-M2-LC



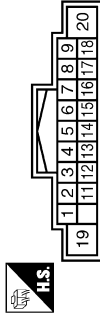
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M71
Connector Name	DISPLAY UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	O	ACC
4	V	COMPOSITE IMAGE GND
5	Y	SHIELD
6	L	RGB (GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
11	P	COMM (CONT->DISP)
13	BR	INVERTER GND

Connector No.	M81
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH18FW-GS2



Terminal No.	Color of Wire	Signal Name [Specification]
6	P	STRG SW A
7	V	ACC
8	B	GND
9	L	ILLUMINATION
15	B	STRG SW GND
16	L	STRG SW B
17	B	GND
18	Y	BATTERY
20	B	GND

14	LG	SIGNAL GND
15	SR	COMPOSITE IMAGE SIGNAL
16	BR	COMPOSITE SYNC
17	G	RGB (R-RED) SIGNAL
18	P	RGB (B-BLUE) SIGNAL
19	W	RGB SYNC
20	G	VP
21	SHIELD	SHIELD
22	L	COMM (DISP->CONT)
23	SHIELD	SHIELD

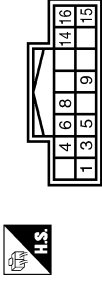
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	ACC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M83
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
36	SB	COMPOSITE IMAGE SIGNAL
37	V	COMPOSITE IMAGE GND
38	P	RGB (BLUE) SIGNAL
39	L	RGB (GREEN) SIGNAL
40	G	RGB (RED) SIGNAL
41	W	RGB SYNC
42	SHIELD	SHIELD
43	B	RGB AREA (YS) SIGNAL
44	L	COMM (DISP->CONT)
45	R	HP
46	LG	SIGNAL GND

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



47	O	SIGNAL VCC
48	BR	COMPOSITE SYNC
49	Y	SHIELD
50	SHIELD	SHIELD
55	SHIELD	SHIELD
56	P	COMM (CONT->DISP)
57	G	VP
58	BR	INVERTER GND
59	Y	INVERTER VCC

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# CAMERA CONTROL UNIT

[BOSE AUDIO WITHOUT NAVIGATION]

< ECU DIAGNOSIS INFORMATION >

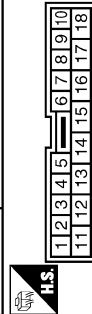
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M84
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH16FW-NH



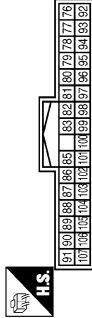
Terminal No.	Color of Wire	Signal Name [Specification]
64	SHIELD	SHIELD
65	W	CAMERA IMAGE SIGNAL
66	G	AUX IMAGE SIGNAL
68	GR	CAMERA CONNECTION RECOGNITION
73	B	SHIELD
74	R	AUX IMAGE GND

Connector No.	M106
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSB



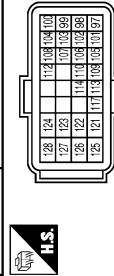
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	- [Without NAVI]
2	W	- [Without NAVI]
3	R	- [Without NAVI]

Connector No.	M85
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
79	P	TEL VOICE SIGNAL (-)
80	L	TEL VOICE SIGNAL (+)
81	SHIELD	SHIELD
82	G	iPod SOUND SIGNAL RH (-)
83	B	iPod SOUND SIGNAL RH (+)
85	B	GND
86	L	CAN-H
87	P	CAN-L
88	G	AV COMM (H) [With BOSE system]
89	R	AV COMM (L) [With BOSE system]
90	SB	AV COMM (H) [With BOSE system]

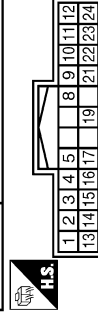
Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-R26-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-L1
114	L	VEHCAN-H1

Terminal No.	Color of Wire	Signal Name [Specification]
91	Y	AV COMM (L) [With BOSE system]
95	R	AUX SOUND SIGNAL RH (+)
96	W	AUX SOUND SIGNAL LH (+)
97	B	AUX SOUND SIGNAL GND
98	W	iPod SOUND SIGNAL LH (-)
99	R	iPod SOUND SIGNAL LH (+)
100	SHIELD	SHIELD
101	BR	SW GND
103	SB	DISK EJECT SIGNAL
104	G	IGNITION
105	O	REVERSE
106	SB	PARKING BRAKE
107	GR	VEHICLE SPEED (3-PULSE)

Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod ADAPTER->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTITY
12	W	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

Connector No.	M86
Connector Name	AV CONTROL UNIT (WITHOUT NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
109	R	SOUND SIGNAL RH (+)
111	B	SHIELD
113	P	SOUND SIGNAL LH (-)
115	G	SOUND SIGNAL RH (-)
119	L	SOUND SIGNAL LH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
14	C	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	R	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)



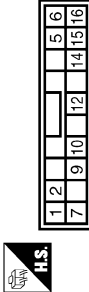
# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M112
Connector Name	iPod SIDE (WITH A-7)
Connector Type	IP18FY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M114
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



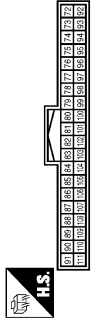
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	O	-
4	SHIELD	-
5	W	-
6	B	-
7	R	-
8	BR	-
9	W	-
10	W	-
11	SHIELD	-

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH30MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
40	Y	-
41	G	-
42	LG	-
43	B	-
44	R	-
45	W	-
46	SHIELD	-
47	P	-
48	I	-
49	SHIELD	-
50	V	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



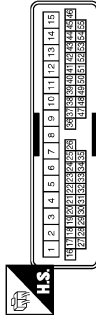
Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TH38MW-NS10



Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	SB	-
12	BR	-

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G  
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J  
K  
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O  
P

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

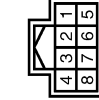
## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)
Connector Type	A08FW



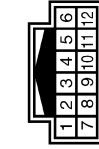
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M155
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



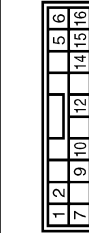
Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	B	
6	SHIELD	
7	G	
8	R	

Connector No.	M181
Connector Name	WIRE TO WIRE
Connector Type	TH12MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	G	
3	O	
4	SHIELD	
5	W	
6	B	
7	R	
8	BR	
9	W	
10	L	
11	SHIELD	

Connector No.	M182
Connector Name	iPod SIDE (WITH M/T)
Connector Type	IP18FGY



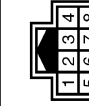
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	L	iPod CONNECTION RECOGNITION GND
10	BR	CHARGE POWER
12	W	SHIELD
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTITY

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



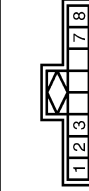
Terminal No.	Color of Wire	Signal Name [Specification]
14	-	
15	-	
17	-	

Connector No.	M361
Connector Name	WIRE TO WIRE
Connector Type	TH08MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	SHIELD	
6	SHIELD	
7	G	
8	R	

Connector No.	M362
Connector Name	AUXILIARY INPUT JACKS (WITH M/T)
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

















JCNWA2432GB

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## BOSE AUDIO WITHOUT NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>M370</td></tr> <tr><td>Connector Name</td><td>AV CONTROL UNIT (WITHOUT NAVI)</td></tr> <tr><td>Connector Type</td><td>GT13SH-2 /S-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>34</td><td>35</td></tr> <tr><td>Color of Wire</td><td>-</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>AM-FM MAIN</td><td>ANTENNA AMP_ON SIGNAL</td></tr> </table>	Connector No.	M370	Connector Name	AV CONTROL UNIT (WITHOUT NAVI)	Connector Type	GT13SH-2 /S-HU	Terminal No.	34	35	Color of Wire	-	-	Signal Name [Specification]	AM-FM MAIN	ANTENNA AMP_ON SIGNAL	<table border="1"> <tr><td>Connector No.</td><td>M375</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SSH-1 /IPP-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>-</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Connector No.	M375	Connector Name	WIRE TO WIRE	Connector Type	GT13SSH-1 /IPP-HU	Terminal No.	1	2	Color of Wire	-	-	Signal Name [Specification]	-	-	<table border="1"> <tr><td>Connector No.</td><td>M376</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SS-1 /S-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>-</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Connector No.	M376	Connector Name	WIRE TO WIRE	Connector Type	GT13SS-1 /S-HU	Terminal No.	1	2	Color of Wire	-	-	Signal Name [Specification]	-	-	<table border="1"> <tr><td>Connector No.</td><td>M378</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SSN-1 /IPP-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>-</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Connector No.	M378	Connector Name	WIRE TO WIRE	Connector Type	GT13SSN-1 /IPP-HU	Terminal No.	1	2	Color of Wire	-	-	Signal Name [Specification]	-	-						
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Signal Name [Specification]	-	-																																																																			
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Connector No.	R1																																																																				
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Terminal No.	1	2	3																																																																		
Color of Wire	O	W	SHIELD																																																																		
Signal Name [Specification]	- [Without NAVI]	- [Without NAVI]	-																																																																		
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Color of Wire	R	SHIELD	G																																																																		
Signal Name [Specification]	MICROPHONE SIGNAL [Without NAVI]	MICROPHONE GND	MICROPHONE VCC [Without NAVI]																																																																		

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# MULTI AV SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## SYMPTOM DIAGNOSIS

### MULTI AV SYSTEM SYMPTOMS

#### Symptom Table

INFOID:000000005102722

#### OPERATION

#### Trouble Diagnosis Chart by Symptom

Symptoms	Check items	Possible malfunction location / Action to take
Multifunction switch and preset switch operation does not work.	<ul style="list-style-type: none"> <li>All switches cannot be operated.</li> <li>"MULTI AV" is displayed on system selection screen when the CONSULT-III is started.</li> </ul>	<ul style="list-style-type: none"> <li>Multifunction switch power supply and ground circuit.</li> <li>AV communication circuit between AV control unit and multifunction switch.</li> </ul> Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-203, "CONSULT - III Function (MULTI AV)"</a> .
	<ul style="list-style-type: none"> <li>All switches cannot be operated.</li> <li>"MULTI AV" is not displayed on system selection screen when the CONSULT-III is started.</li> </ul>	AV control unit power supply and ground circuit malfunction. Refer to <a href="#">AV-236, "AV CONTROL UNIT : Diagnosis Procedure"</a> .
	Only specified switch cannot be operated.	Multifunction switch or preset switch malfunction. Perform multifunction switch and preset switch self-diagnosis function. Refer to <a href="#">AV-190, "Diagnosis Description"</a> .

#### RELATED TO HANDS-FREE PHONE

##### Basic Inspection

- Check that the cellular phone is corresponding type (Bluetooth™ correspond) when the hands-free related malfunction vehicle is in service before performing a diagnosis.
- There is a case that malfunction occurs due to the version change of the phone type, etc. even though it is a corresponding type. Therefore, confirm it by changing the cellular phone to another corresponding type phone, and check that it operates normally. It is necessary to distinguish whether the cause is the vehicle or cellular phone.

##### Simple check for Bluetooth™ communication

- If cellular phone and AV control unit cannot be connected with Bluetooth™ communication, following procedure allows the technician to judge which device has malfunction.

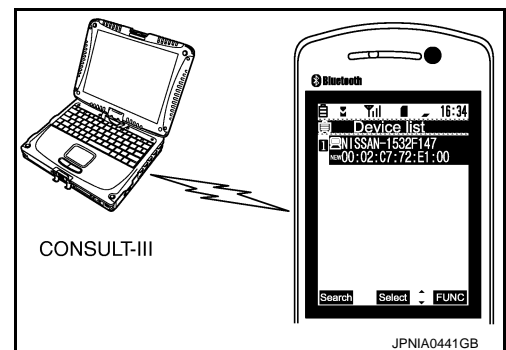
- Turn on a cellular phone, not connecting Bluetooth™ communication.
- Start CONSULT-III, then start Windows™.
- Set CONSULT-III near a cellular phone.
- When operated Bluetooth™ registration by cellular phone, check if CONSULT-III\* would be displayed on the device name.

(If other Bluetooth™ device is located near cellular phone, a name of the device would be displayed also.)

##### NOTE:

\*:Displayed device name is "NISSAN-\*\*\*\*\*".

- If no device name is displayed, cellular phone is malfunctioning. Repair the cellular phone first, then perform diagnosis.
- If CONSULT-III is displayed on device name, cellular phone is normal. Perform diagnosis as per the following table.



##### On Board Self-diagnosis of Hands-free Phone System

Always perform the on board self-diagnosis at first after completing the basic inspection when the malfunction is detected on the hands-free phone system. Narrow down possible causes using the Diagnosis Chart if there is no malfunction in the on board self-diagnosis.

#### Trouble Diagnosis Chart by Symptom

# MULTI AV SYSTEM SYMPTOMS

[BOSE AUDIO WITHOUT NAVIGATION]

< SYMPTOM DIAGNOSIS >

Symptoms	Check items	Probable malfunction location
Does not recognize cellular phone connection. (No connection is displayed on the display at the guide.)	Repeat the registration of cellular phone.	TEL adapter unit malfunction. Refer to <a href="#">AV-477, "Exploded View"</a> .
Hands-free phone cannot be established.	Both the reception and the speech cannot be performed	<ul style="list-style-type: none"> <li>Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-203, "CONSULT - III Function (MULTI AV)"</a>.</li> <li>No malfunction. TEL adapter unit malfunction. Refer to <a href="#">AV-477, "Exploded View"</a>.</li> <li>Malfunction is detected. Refer to <a href="#">AV-203, "CONSULT - III Function (MULTI AV)"</a>.</li> </ul>
The other party's voice cannot be heard by hands-free phone.	The operation of the "☞☜" switch can be performed.	TEL voice signal circuit malfunction between TEL adapter unit and AV control unit.
	The operation of the "☞☜" switch cannot be performed.	Control signal circuit.
Originating sound is not heard by the other party with hands-free phone communication.	Sound operation function is normal.	TEL adapter unit. Refer to <a href="#">AV-477, "Exploded View"</a> .
	Sound operation function does not work.	Microphone signal circuit. Refer to <a href="#">AV-253, "Diagnosis Procedure"</a> .

## RELATED TO CAMERA

Symptoms	Check items	Probable malfunction location / Action to take
It cannot be switched to rear view monitor even when the selector lever is in the reverse position.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-203, "CONSULT - III Function (MULTI AV)"</a> .
	There is not malfunction in the CONSULT-III self-diagnosis result.	Reverse signal circuit malfunction.(AV control unit)
Camera image is not shown.	AUX images are normal.	<ul style="list-style-type: none"> <li>Rear view camera power supply circuit malfunction.</li> <li>Camera image signal circuit malfunction between camera control unit and AV control unit. Refer to <a href="#">AV-257, "Diagnosis Procedure"</a>.</li> </ul>
	AUX images are not displayed.	Composite image signal circuit malfunction.
Possible route line is indicated abnormally when camera image is displayed.	"Steer. Angle Sensor" turns ON at "Confirmation/Adjustment" of on board diagnosis item "Camera Cont." turns ON.	Sensor signal 3 circuit malfunction. Refer to <a href="#">AV-263, "Diagnosis Procedure"</a> .
	"Steer. Angle Sensor" turns ON at "Confirmation/Adjustment" of on board diagnosis item "Camera Cont." does not turns ON.	<ul style="list-style-type: none"> <li>Sensor signal 1 circuit. Refer to <a href="#">AV-261, "Diagnosis Procedure"</a>.</li> <li>Sensor signal 2 circuit. Refer to <a href="#">AV-261, "Diagnosis Procedure"</a>.</li> </ul>
Camera image is rolling.	AUX image is rolling	<ul style="list-style-type: none"> <li>Horizontal synchronizing (HP) signal circuit malfunction. Refer to <a href="#">AV-247, "Diagnosis Procedure"</a>.</li> <li>Vertical synchronizing (VP) signal circuit malfunction. Refer to <a href="#">AV-248, "Diagnosis Procedure"</a>.</li> </ul>

# MULTI AV SYSTEM SYMPTOMS

[BOSE AUDIO WITHOUT NAVIGATION]

< SYMPTOM DIAGNOSIS >

## RELATED TO RGB IMAGE

Trouble diagnosis chart by symptom

Symptoms	Check items	Possible malfunction location / Action to take
RGB image is not shown.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-203, "CONSULT - III Function (MULTI AV)"</a> .
	There is no malfunction in CONSULT-III self-diagnosis results.	Vertical synchronizing (VP) signal circuit. Refer to <a href="#">AV-248, "Diagnosis Procedure"</a> .
Color of RGB image is not proper.	Light blue (Cyan) tint.	RGB signal (R: red) circuit. Refer to <a href="#">AV-242, "Diagnosis Procedure"</a> .
	Purple (Magenta) tint.	RGB signal (G: green) circuit. Refer to <a href="#">AV-243, "Diagnosis Procedure"</a> .
	Screen looks yellowish.	RGB signal (B: blue) circuit. Refer to <a href="#">AV-244, "Diagnosis Procedure"</a> .
RGB screen is rolling.	—	RGB synchronizing signal circuit. Refer to <a href="#">AV-245, "Diagnosis Procedure"</a> .
Fuel economy display is malfunctioning.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-203, "CONSULT - III Function (MULTI AV)"</a> .
	There is no malfunction in CONSULT-III self-diagnosis results.	Ignition signal circuit malfunction. Refer to <a href="#">AV-236, "AV CONTROL UNIT : Diagnosis Procedure"</a> .

## RELATED TO AUDIO

Trouble diagnosis chart by symptom

Symptoms	Check items	Possible malfunction location / Action to take
The disk cannot be removed.	—	Disk eject signal circuit.
Audio sound is not heard.	No sound from all speakers.	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-203, "CONSULT - III Function (MULTI AV)"</a> .
	Sound is heard only from specific places (RH front, RH rear, LH front and LH rear).	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-203, "CONSULT - III Function (MULTI AV)"</a> .
Satellite radio is not received.	"ANTENNA" is not displayed even when the channel is turned to 0 in Satellite radio mode.	Perform the following inspection procedure. 1. Check satellite radio antenna (antenna base) mounting nut for looseness. <b>NOTE:</b> Tightening torque: 6.5 N·m (0.66 kg·m, 58 in·lb.) 2. Visually check for satellite radio antenna feeder. 3. Replace the satellite radio antenna (antenna base) . Refer to <a href="#">AV-464, "Exploded View"</a> . 4. Replace the satellite radio tuner. Refer to <a href="#">AV-465, "Exploded View"</a> .
	"ANTENNA" is displayed when the channel is turned to 0 in Satellite radio mode.	Perform the following inspection procedure. 1. Check the connection between satellite radio tuner and antenna feeder. 2. Check the connection between satellite radio antenna (antenna base) and antenna feeder. 3. Check Antenna feeder for open circuit. 4. Replace the satellite radio antenna (antenna base) . Refer to <a href="#">AV-464, "Exploded View"</a> . 5. Replace the satellite radio tuner. Refer to <a href="#">AV-465, "Exploded View"</a> .
The sound of Satellite radio is not heard.	Other audio sounds are normal.	Satellite radio sound signal circuit between AV control unit and satellite radio tuner.
It does not change to Satellite radio mode.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-203, "CONSULT - III Function (MULTI AV)"</a> .
AM/FM radio is not received.	Other audio sounds are normal.	<ul style="list-style-type: none"> <li>• Antenna amp. ON signal circuit.</li> <li>• Antenna feeder.</li> </ul>
Sound equalizer is not switched.	—	Roof status signal (audio) circuit malfunction.

# MULTI AV SYSTEM SYMPTOMS

[BOSE AUDIO WITHOUT NAVIGATION]

< SYMPTOM DIAGNOSIS >

## RELATED TO iPod®

Trouble Diagnosis Chart by Symptom

Connect another iPod® and check if the symptom is reproduced or not. If the symptom is reproduced, diagnose the vehicle. If no malfunction is detected, replace the iPod harness.

iPod® is a trademark of Apple inc., registered in the U.S. and other countries.

### NOTE:

- It is unable to check that between iPod® and iPod harness.
- The iPod Touch and iPod Classic may not charge properly in some cases.
- As for iPod released concurrently with and after iPhone 3G (iPod Touch, iPod Nano 4th generation, iPod Classic 2nd generation, etc.) , 12 V charging circuit is deleted from iPod®.

Symptoms	Check items	Possible malfunction location / Action to take
The sound of iPod® is not heard.	Other audio sounds are normal.	<ul style="list-style-type: none"> <li>• iPod sound signal circuit between AV control unit and iPod adapter.</li> <li>• iPod sound signal circuit between iPod® and iPod adapter.</li> </ul>
It does not change to iPod mode.	There is malfunction in the CONSULT-III self-diagnosis.	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-203, "CONSULT - III Function (MULTI AV)"</a> .
"iPod is not connected" is displayed when it comes to iPod mode.	Connected to iPod®.	iPod connection recognition signal circuit between iPod® and iPod adapter.
iPod® cannot charge the battery.	Not chargeable even when connecting other iPod®. Refer to above.	iPod battery charge circuit between iPod® and iPod adapter.
The title of music file in the iPod® is not indicated.	—	Communication circuit between iPod® and iPod adapter.
Accessing the iPod® is unavailable from the vehicle.		

## RELATED TO STEERING SWITCH

Trouble diagnosis chart by symptom

Symptoms	Probable malfunction location
None of the steering switch operations work.	Steering switch signal GND circuit. Refer to <a href="#">AV-269, "Diagnosis Procedure"</a> .
Only specified switch cannot be operated.	Steering switch. Refer to <a href="#">AV-468, "Exploded View"</a> .
"SOURCE", "MENU UP", "MENU DOWN", "⏪ ⏩" switches of steering switch are not operated.	Steering switch signal A circuit. Refer to <a href="#">AV-265, "Diagnosis Procedure"</a> .
"VOL UP", "VOL DOWN", "⏮ ⏭" switches of steering switch are not operated.	Steering switch signal B circuit. Refer to <a href="#">AV-267, "Diagnosis Procedure"</a> .

## RELATED TO AUXILIARY INPUT

### NOTE:

Check that there is no malfunction of AUX equipment main body before performing a diagnosis.

Trouble diagnosis chart by symptom

Symptoms	Check items	Probable malfunction location
No voice sound is heard when AUX mode is selected.	Voice sound is heard when other modes are selected.	AUX sound signal circuits malfunction between auxiliary input jacks and AV control unit.

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AV

## MULTI AV SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

Symptoms	Check items	Probable malfunction location
Image is not displayed when AUX mode is selected.	Camera image is normal.	<ul style="list-style-type: none"> <li>• AUX image signal circuit malfunction. Refer to <a href="#">AV-249, "Diagnosis Procedure"</a>.</li> <li>• Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and display unit. Refer to <a href="#">AV-247, "Diagnosis Procedure"</a>.</li> <li>• RGB area (YS) signal circuit malfunction between AV control unit and display unit. Refer to <a href="#">AV-246, "Diagnosis Procedure"</a>.</li> </ul>
	Camera image is not displayed.	Composite image signal circuit malfunction.
It does not change from AUX mode to other modes.	—	Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit. Refer to <a href="#">AV-248, "Diagnosis Procedure"</a> .



# NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

## NORMAL OPERATING CONDITION

### Description

INFOID:000000005102728

### BASIC OPERATIONS

Symptom	Possible cause	Possible solution
No image is displayed.	The brightness is at the lowest setting.	Adjust the brightness of the display.
	The system is in the video mode.	Press <DISC> to change the mode.
	The display is turned off.	Press <*/> to turn on the display.
Screen not clear.	Contrast setting is not appropriate.	Adjust the contrast of the display.
The screen is too dim. The movement is slow.	The temperature in the interior of the vehicle is low.	Wait until the interior of the vehicle has warmed up.
Some pixels in the display are darker or brighter than others.	This condition is an inherent characteristic of liquid crystal displays.	This is not a malfunction.
Some menu items cannot be selected.	Some menu items become unavailable while the vehicle is driven.	Park the vehicle in a safe location, and then operate the multi AV system.

### RELATED TO VOICE RECOGNITION

#### Related to Telephone

The system should respond correctly to all voice commands without difficulty. If problems are encountered, try the following solutions.

Where the solutions are listed by number, try each solution in turn, starting with number 1, until the problem is resolved.

Symptom	Solution
System fails to interpret the command correctly.	1. Ensure that the command is valid.
	2. Ensure that the command is spoken after the tone.
	3. Speak clearly without pausing between words and at level appropriate to the ambient noise level in the vehicle.
	4. Ensure that the ambient noise level is not excessive (for example, windows open or defroster on). <b>NOTE:</b> If it is too noisy to use the phone, it is likely that the voice commands will be recognized.
	5. If more than one command was said at a time, try saying the commands separately.
	6. If the system consistently fails to recognize commands, the voice training procedure should be carried out to improve the recognition response for the speaker. See "Speaker adaptation (SA) mode" earlier in this section. Refer to "OWNER'S MANUAL".
The system consistently selects the wrong voicetag	1. Ensure that the phone book entry name requested matches what was originally stored. This can be confirmed by highlighting the name of the entry name in Phone menu.
	2. Replace one of the names being confused with a new name.

### RELATED TO AUDIO

- The majority of the audio malfunctions are the result of outside causes (bad CD/cassette, electromagnetic interference, etc.). Check the symptoms below to diagnose the malfunction.
- The vehicle itself can be a source of noise if noise prevention parts or electrical equipment is malfunctioning. Check if noise is caused and/or changed by engine speed, ignition switch turned to each position, and operation of each piece of electrical equipment, and then determine the cause.

#### NOTE:

- CD-R is not guaranteed to play because they can contain compressed audio (MP3, WMA) or could be incorrectly mastered by the customer on a computer.
- Check if the CDs carry the Compact Disk Logo. If not, the disk is not mastered to the "red book" Compact Disk Standard and may not play.

## NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITHOUT NAVIGATION]

Symptom	Cause and Counter measure
Cannot play	Check if the CD was inserted correctly.
	Check if the CD is scratched or dirty.
	Check if there is condensation inside the player, and if there is, wait until the condensation is gone (about 1 hour) before using the player.
	If there is a temperature increase error, the player will play correctly after it returns to the normal temperature.
	If there is a mixture of music CD files (CD-DA data) and MP3/WMA files on a CD, only the music CD files (CD-DA data) will be played.
	Files with extensions other than ".MP3", ".WMA", ".mp3", or ".wma" cannot be played. In addition, the character codes and number of characters for folder names and file names should be in compliance with the specifications.
	Check if the disk or the file is generated in an irregular format, This may occur depending on the variation or the setting of MP3/WMA writing applications or other text editing applications.
	Check if the finalization process, such as session close and disk close, is done for the disk.
Poor sound quality	Check if the CD is scratched or dirty.
	Check if the CD is protected by copyright.
It takes a relatively long time before the music starts playing.	If there are many folder or file levels on the MP3/WMA CD, or if it is a multisession disk, some time may be required before the music starts playing.
Music cuts off or skips	The writing software and hardware combination might not match, or the writing speed, writing depth, writing width might not match the specifications. Try using the slowest writing speed.
Skipping with high bit rate files	Skipping may occur with large quantities if data such as for high bit rate data.
Move immediately to the next song when playing	When a non-MP3/WMA file has been given an extension of ".MP3", ".WMA", ".mp3", or ".wma", or when play is prohibited by copyright protection, the player will skip to the next song.
The songs do not play back in the desired order.	The playback order is the order in which the files were written by the software, so the files might not play in the desired order.

Noise resulting from variations in field strength, such as fading noise and multi-path noise, or external noise from trains and other sources, is not a malfunction.

**NOTE:**

- Fading noise: This noise occurs because of variations in the field strength in a narrow range due to mountains or buildings blocking the signal.
- Multi-path noise: This noise results from a time difference between the broadcast waves directly from the station arriving at the antenna and the waves reflected by mountains or buildings.

PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000005156447

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

**WARNING:**

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIR BAG".
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

**WARNING:**

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

Precaution for Battery Service

INFOID:000000005156451

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

Service Procedure Precautions for Models with a Pop-up Roll Bar

INFOID:000000005156448

**WARNING:**

- Risk of passenger injury or death may increase if the pop-up roll bar does not deploy during a roll over collision. In order to reduce the chance of an incident where the pop-up roll bar is inoperative, all maintenance must be performed by a NISSAN or INFINITI dealer.
- Before removing and installing the pop-up roll bar component parts and harness, always turn the ignition switch OFF, disconnect the battery negative terminal, and wait for 3 minutes or more. (The purpose of this operation is to discharge electricity that is accumulated in the auxiliary power supply circuit in the air bag diagnosis sensor unit.)
- When repairing, removing, and installing a pop-up roll bar, always refer to SRS AIR BAG and SRS AIR BAG CONTROL warnings in the Service Manual.

Precaution for Trouble Diagnosis

INFOID:000000004929262

AV COMMUNICATION SYSTEM

- Do not apply voltage of 7.0 V or higher to the measurement terminals.
- Use the tester with its open terminal voltage being 7.0 V or less.
- Be sure to turn ignition switch OFF and disconnect the battery cable from the negative terminal before checking the circuit.

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# PRECAUTIONS

< PRECAUTION >

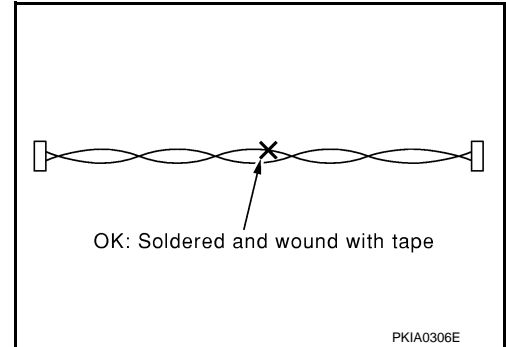
[BOSE AUDIO WITHOUT NAVIGATION]

## Precaution for Harness Repair

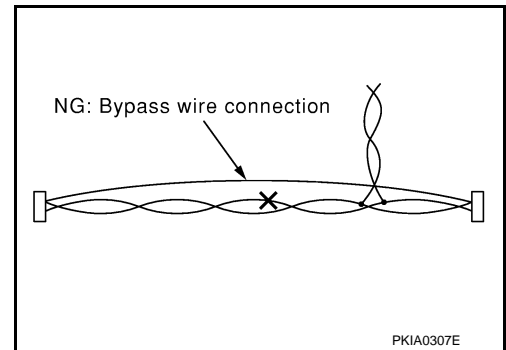
INFOID:000000004929263

### AV COMMUNICATION SYSTEM

- Solder the repaired parts, and wrap with tape. [Frays of twisted line must be within 110 mm (4.33 in).]



- Do not perform bypass wire connections for the repair parts. (The spliced wire will become separated and the characteristics of twisted line will be lost.)



# PREPARATION

< PREPARATION >

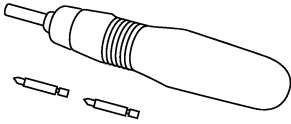
[BOSE AUDIO WITHOUT NAVIGATION]

## PREPARATION

### PREPARATION

#### Commercial Service Tools

INFOID:000000004929277

Tool name	Description
<p>Power tool</p>  <p>PBIC0191E</p>	<p>Loosening bolts and nuts</p>

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AV

# AV CONTROL UNIT

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## REMOVAL AND INSTALLATION

### AV CONTROL UNIT

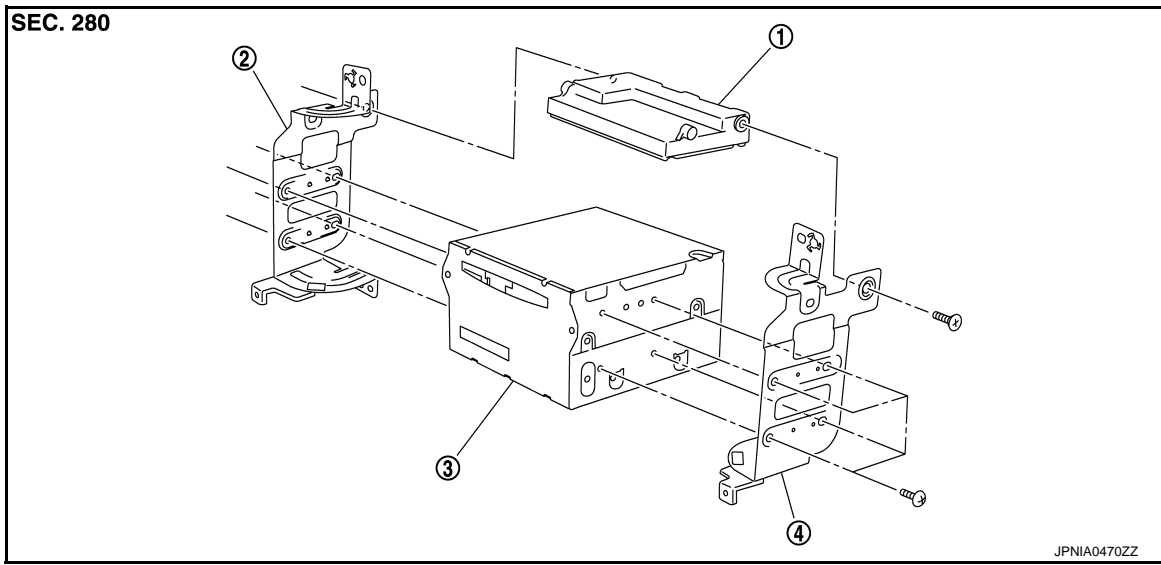
#### Exploded View

INFOID:000000005102729

#### REMOVAL

Refer to [IP-12, "Exploded View"](#).

#### DISASSEMBLY



1. Unified meter and A/C amp.
2. Bracket LH
3. AV control unit
4. Bracket RH

#### Removal and Installation

INFOID:000000005183752

#### REMOVAL

1. Remove display unit.
2. Remove AV control unit with a unified meter and A/C amp. as a single unit from the body.
3. Remove bracket screws, and then remove AV control unit.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

**Since AV control unit connector and unified meter and A/C amp. connector have the same form, be careful not to insert them wrongly.**

# DISPLAY UNIT

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## DISPLAY UNIT

### Exploded View

INFOID:000000004929185

Refer to [IP-12, "Exploded View"](#).

### Removal and Installation

INFOID:000000004929186

#### REMOVAL

1. Remove cluster lid D. Refer to [IP-12, "Exploded View"](#).
2. Remove display unit with bracket as a single unit.

#### INSTALLATION

Install in the reverse order of removal.

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# DOOR SQUAWKER

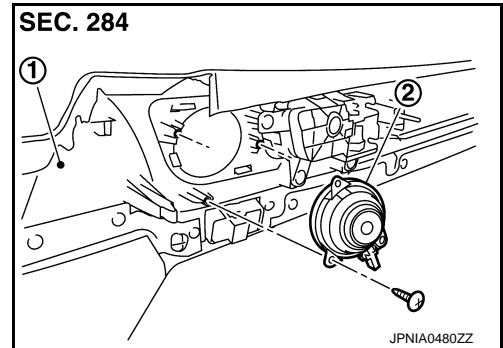
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## DOOR SQUAWKER

### Exploded View

INFOID:000000004929187



1. Door finisher assembly
2. Door squawker

### Removal and Installation

INFOID:000000004929188

#### REMOVAL

1. Remove door finisher assembly. Refer to [INT-12, "Exploded View"](#).
2. Remove door squawker from door finisher assembly.

#### INSTALLATION

Install in the reverse order of removal.



# DOOR WOOFER

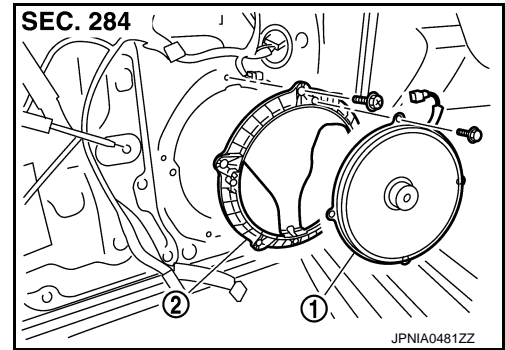
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## DOOR WOOFER

### Exploded View

INFOID:000000004929189



1. Door woofer
2. Woofer bracket

### Removal and Installation

INFOID:000000004929190

#### REMOVAL

1. Remove door finisher assembly. Refer to [INT-12, "Exploded View"](#).
2. Remove door woofer from woofer bracket.

#### INSTALLATION

Install in the reverse order of removal.

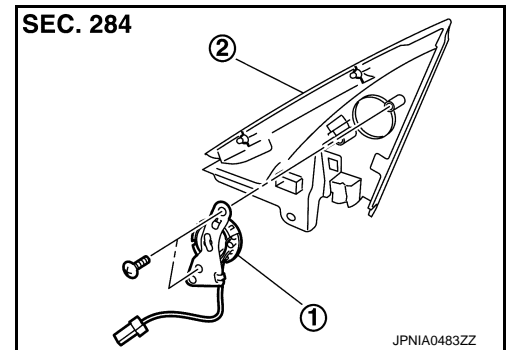
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AV

## TWEETER

### Exploded View

INFOID:000000004929193



1. Tweeter
2. Corner cover

### Removal and Installation

INFOID:000000004929194

#### REMOVAL

1. Remove corner cover. Refer to [MIR-19. "DOOR MIRROR ASSEMBLY : Exploded View"](#).
2. Remove tweeter from corner cover.

#### INSTALLATION

Install in the reverse order of removal.

# CENTER SPEAKER

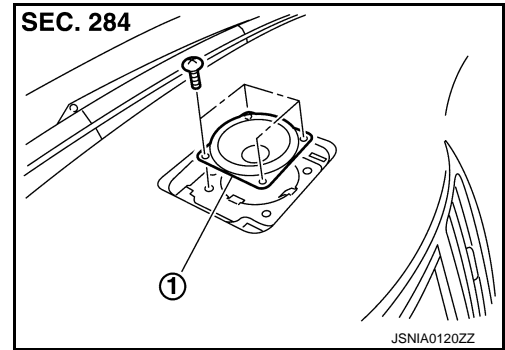
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## CENTER SPEAKER

### Exploded View

INFOID:000000004929195



1. Center speaker

### Removal and Installation

INFOID:000000004929196

#### REMOVAL

1. Remove upper grille, and then remove center speaker. Refer to [IP-12, "Exploded View"](#).

#### INSTALLATION

Install in the reverse order of removal.

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AV

## REAR WOOFER

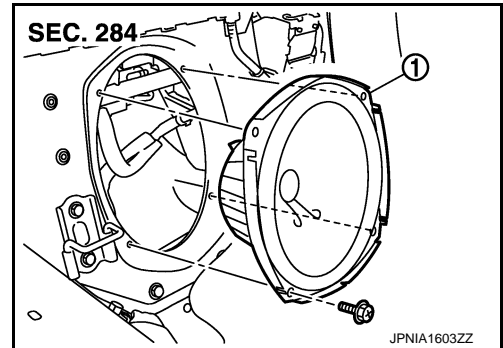
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

### REAR WOOFER

#### Exploded View

INFOID:000000004929197



1. Rear woofer

#### Removal and Installation

INFOID:000000004929198

##### REMOVAL

1. Remove rear seatback. Refer to [SE-246. "Exploded View"](#).
2. Remove rear woofer from the vehicle.

##### INSTALLATION

Install in the reverse order of removal.

# HEADREST SPEAKER

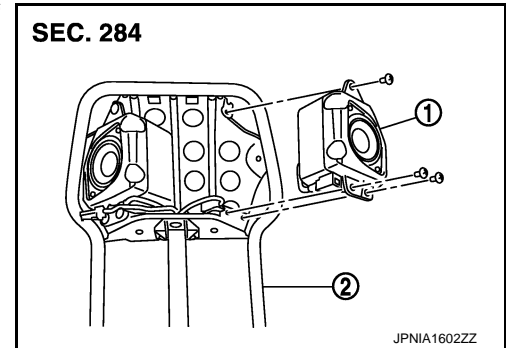
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## HEADREST SPEAKER

### Exploded View

INFOID:000000005107576



1. Headrest speaker
2. Headrest frame

### Removal and Installation

INFOID:000000005107577

#### REMOVAL

1. Remove headrest frame. Refer to [SE-223, "Exploded View"](#).
2. Remove headrest speaker screws, then disconnect headrest speaker connector and remove headrest speaker.

#### INSTALLATION

Install in the reverse order of removal.

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AV

## BOSE AMP.

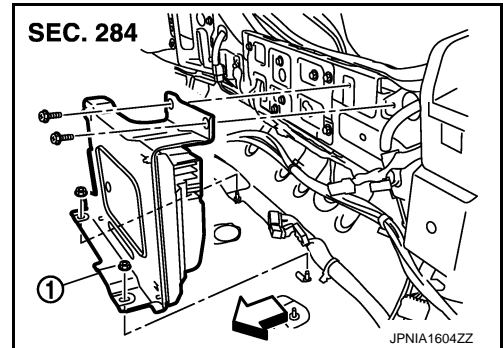
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

### BOSE AMP.

#### Exploded View

INFOID:000000004929199



1. BOSE amp.

↳ Vehicle front

#### Removal and Installation

INFOID:000000004929200

##### REMOVAL

1. Remove net guard bracket assembly. Refer to [INT-23, "Exploded View"](#).
2. Remove BOSE amp. from trunk room.

##### INSTALLATION

Install in the reverse order of removal.

# AUDIOPILOT® MICROPHONE

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## AUDIOPILOT® MICROPHONE

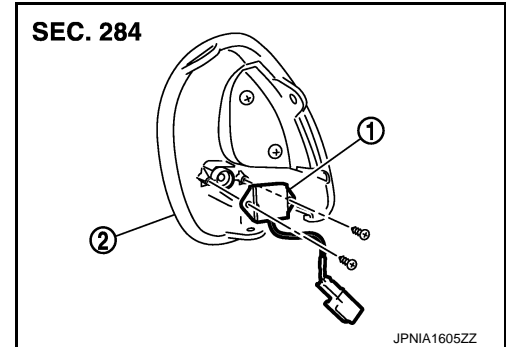
### Exploded View

INFOID:000000005107545

#### REMOVAL

Refer to [SE-223, "Exploded View"](#).

#### DISASSEMBLY



1. AudioPilot® microphone
2. Headrest inner grille

### Removal and Installation

INFOID:000000005107546

#### REMOVAL

1. Remove headrest inner grille. Refer to [SE-223, "Exploded View"](#).
2. Remove AudioPilot® microphone from headrest inner grille.

#### INSTALLATION

Install in the reverse order of removal.

A  
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## ANTENNA BASE

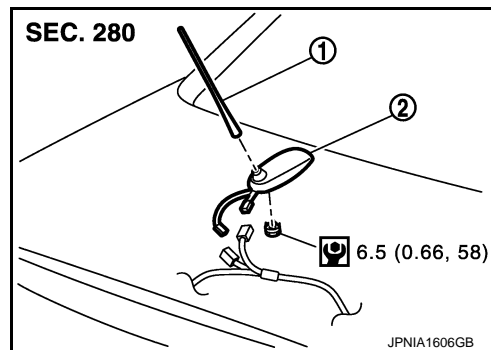
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

### ANTENNA BASE

#### Exploded View

INFOID:000000004931938



1. Antenna rod
2. Antenna base

Refer to [GI-4, "Components"](#) for symbols in the figure.

#### Removal and Installation

INFOID:000000004931939

##### REMOVAL

1. Remove trunk lid finisher inner. Refer to [INT-26, "Exploded View"](#).
2. Remove antenna base mounting nut.
3. Remove antenna base.

##### INSTALLATION

Install in the reverse order of removal.

##### **CAUTION:**

**Be careful about tightening torque. Antenna sensitivity becomes poor, and when it is excessive, trunk lid panel may be deformed, when antenna base mounting nut tightening torque is loose.**



# SATELLITE RADIO TUNER

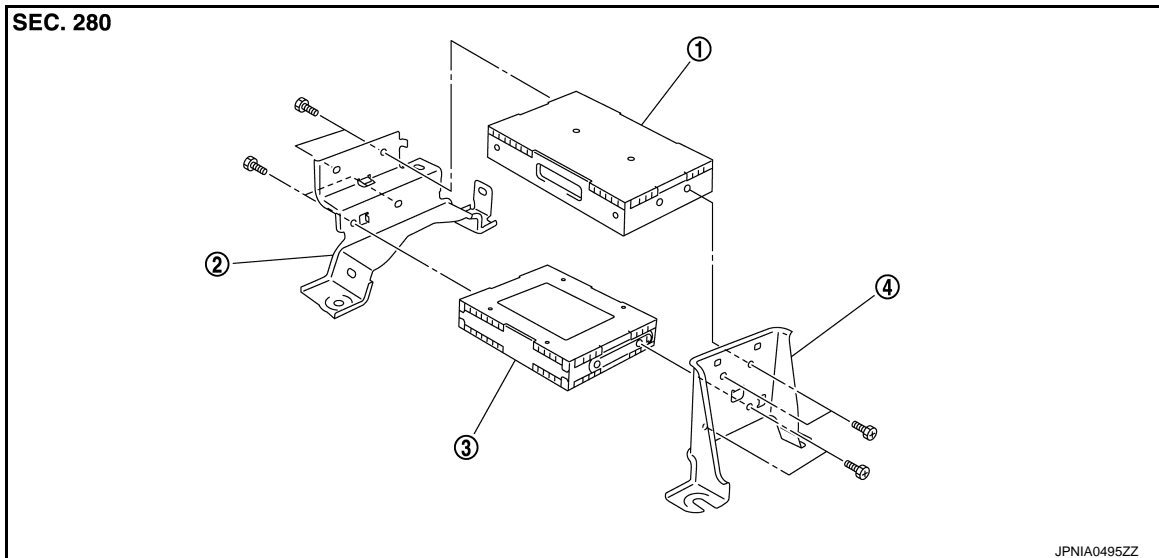
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## SATELLITE RADIO TUNER

### Exploded View

INFOID:000000004371695



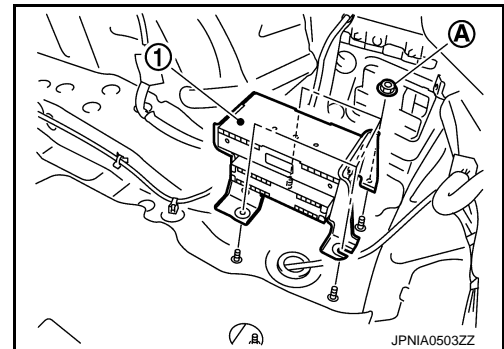
1. TEL adapter unit
2. Bracket (front)
3. Satellite radio tuner
4. Bracket (rear)

### Removal and Installation

INFOID:000000004371696

#### REMOVAL

1. Remove trunk floor spacer RH. Refer to [INT-23, "Exploded View"](#).
2. Remove nuts (A) from the trunk room RH, and remove TEL adapter unit and satellite radio tuner (1) from trunk room side.



#### INSTALLATION

Install in the reverse order of removal.

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# MULTIFUNCTION SWITCH

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## MULTIFUNCTION SWITCH

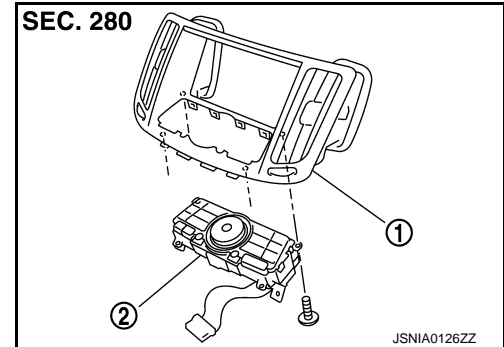
### Exploded View

INFOID:000000004929206

#### REMOVAL

Refer to [IP-12, "Exploded View"](#).

#### DISASSEMBLY



1. Center ventilator grille
2. Multifunction switch

### Removal and Installation

INFOID:000000004929207

#### REMOVAL

1. Remove cluster lid D. Refer to [IP-12, "Exploded View"](#).
2. Remove multifunction switch with center ventilator grille as a single unit.
3. Remove multifunction switch from center ventilator.

#### INSTALLATION

Install in the reverse order of removal.

# PRESET SWITCH

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## PRESET SWITCH

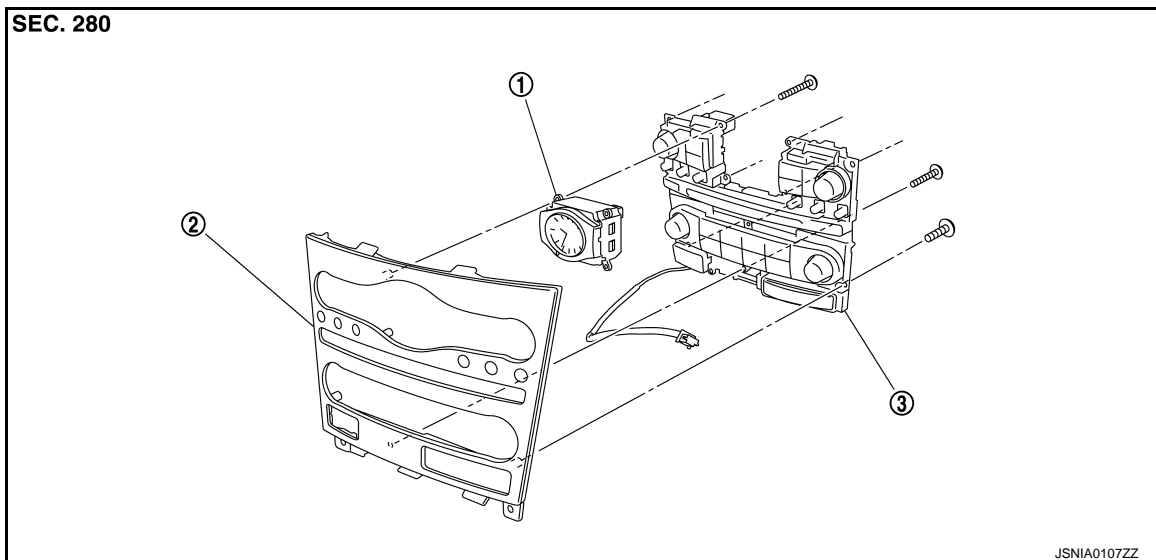
### Exploded View

INFOID:000000004929208

#### REMOVAL

Refer to [IP-12, "Exploded View"](#).

#### DISASSEMBLY



1. Clock

2. Cluster lid C

3. Preset switch

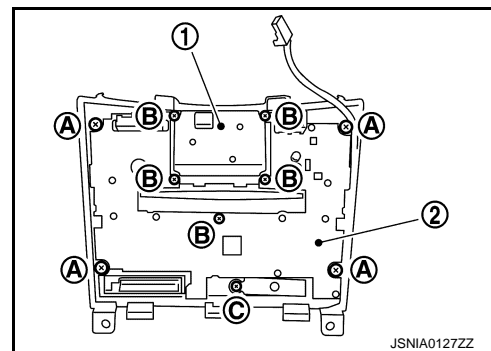
### Removal and Installation

INFOID:000000004929209

#### REMOVAL

1. Remove cluster lid C. Refer to [IP-12, "Exploded View"](#).
2. Remove preset switch (2) from cluster lid C.

- 1. Clock
- A. Screw
- B. Screw
- C. Screw



#### INSTALLATION

Install in the reverse order of removal.

#### NOTE:

When installing preset switch, do not allow the print wire that connects preset switch and multifunction switch to get caught in between AV control unit and preset switch.

## STEERING SWITCH

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

---

### STEERING SWITCH

#### Exploded View

INFOID:000000004929210

Refer to [ST-13. "Exploded View"](#).

#### Removal and Installation

INFOID:000000004929211

#### REMOVAL

Refer to [ST-13. "Removal and Installation"](#).

#### INSTALLATION

Install in the reverse order of removal.

# IPOD ADAPTER

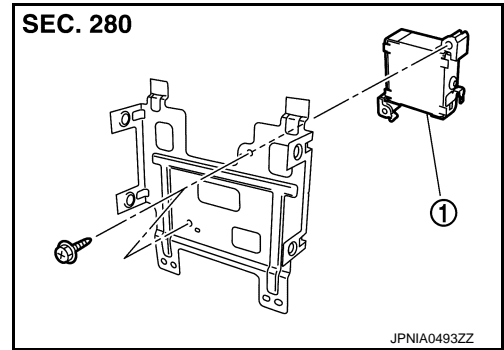
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## IPOD ADAPTER

Exploded View

INFOID:000000004929212



1. iPod adapter

## Removal and Installation

INFOID:000000004929213

### REMOVAL

1. Remove display assy. Refer to [AV-455. "Removal and Installation"](#).
2. Remove display from display bracket.
3. Remove iPod adapter from display bracket.

### INSTALLATION

Install in the reverse order of removal.

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AV

# IPOD CONNECTOR

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## IPOD CONNECTOR

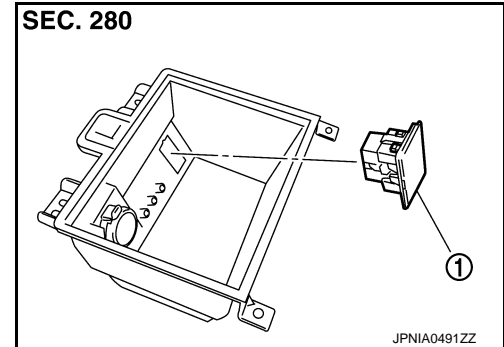
### Exploded View

INFOID:0000000049292.14

#### REMOVAL

Refer to [IP-24, "Exploded View"](#).

#### DISASSEMBLY



1. iPod connector

### Removal and Installation

INFOID:0000000049292.15

#### REMOVAL

1. Remove center console assembly. Refer to [IP-24, "Exploded View"](#).
2. Push the pawl from the back of center console to remove iPod connector.

#### INSTALLATION

Install in the reverse order of removal.

# AUXILIARY INPUT JACKS

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## AUXILIARY INPUT JACKS

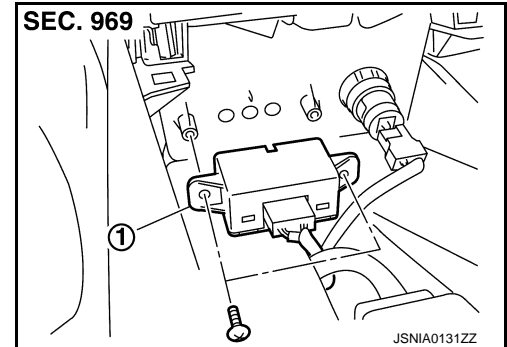
### Exploded View

INFOID:000000004929216

#### REMOVAL

Refer to [IP-24, "Exploded View"](#).

#### DISASSEMBLY



1. Auxiliary input jacks

### Removal and Installation

INFOID:000000004929217

#### REMOVAL

1. Remove center console assembly. Refer to [IP-24, "Exploded View"](#).
2. Remove auxiliary input jacks from center console assembly.

#### INSTALLATION

Install in the reverse order of removal.

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AV

# MICROPHONE

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## MICROPHONE

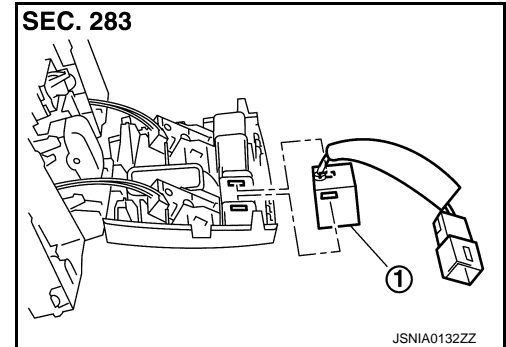
### Exploded View

INFOID:0000000049292.18

#### REMOVAL

Refer to [INL-99, "Exploded View"](#).

#### DISASSEMBLY



1. Microphone

### Removal and Installation

INFOID:0000000049292.19

#### REMOVAL

1. Remove map lamp. Refer to [INL-99, "Exploded View"](#).
2. Remove microphone from map lamp.

#### INSTALLATION

Install in the reverse order of removal.



# CAMERA CONTROL UNIT

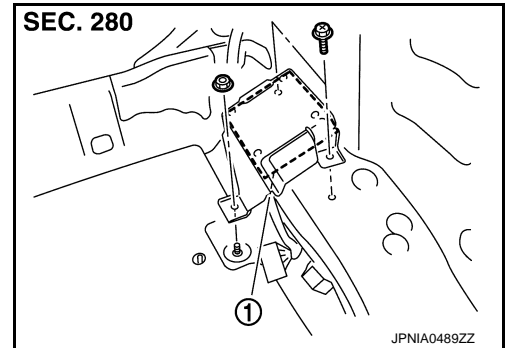
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## CAMERA CONTROL UNIT

### Exploded View

INFOID:000000004929221



1. Camera control unit

### Removal and Installation

INFOID:000000004929222

#### REMOVAL

1. Remove trunk floor spacer RH, and then remove camera control unit. Refer to [INT-23. "Exploded View"](#).

#### INSTALLATION

Install in the reverse order of removal.

### Adjustment

INFOID:000000004929223

#### ADJUSTMENT

There may be a misalignment of possible route line center position of rear view monitor after removing camera control unit. Therefore, correct neutral position with the following procedure.

1. Steer the steering wheel to the leftmost and rightmost ends.
2. Drive vehicle at 30 km/h (18.6 MPH) min. speed at least 100 m (328.1 ft).

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AV

# REAR VIEW CAMERA

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## REAR VIEW CAMERA

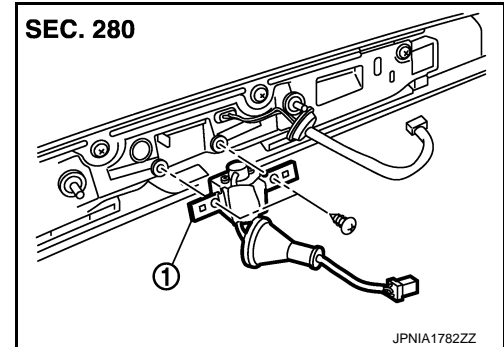
### Exploded View

INFOID:000000004929224

#### REMOVAL

Refer to [EXT-36, "Exploded View"](#).

#### DISASSEMBLY



1. Rear view camera

### Removal and Installation

INFOID:000000004929225

#### REMOVAL

1. Remove trunk lid finisher outer. Refer to [EXT-36, "Exploded View"](#).
2. Remove rear view camera from trunk lid finisher outer.

#### INSTALLATION

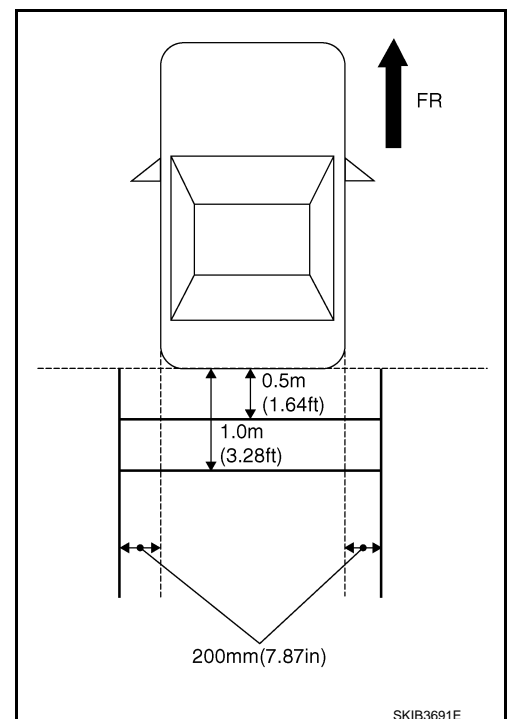
Install in the reverse order of removal.

### Adjustment

INFOID:000000004929226

Adjust the guide line position if the guide line position is shifted after installing the rear view camera.

1. Draw lines on rearward area of the vehicle passing through the following points: 200 mm (7.87 in) from both sides of the vehicle, and 0.5 m (1.64 ft), 1.0 m (3.28 ft) from the rear end of the bumper.
2. Set into "Adjust offset of rear view camera" mode of Confirmation / Adjustment mode.



# REAR VIEW CAMERA

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

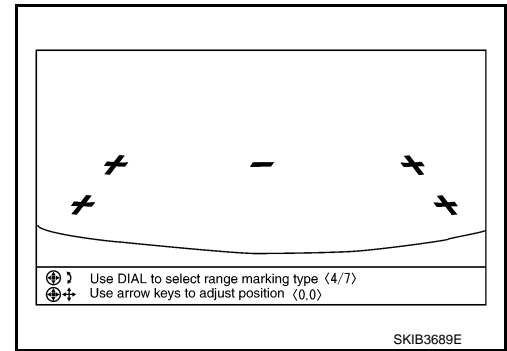
3. Rotate the center dial, and then select the guiding line pattern so that its angle is aligned with the correction line of the rear of the vehicle.

**Selected pattern : 7**

4. Make fine adjustment to the correction line of the rear of the vehicle with up/down/left/right switches so that its position is aligned with the guiding line. Press "OK" switch and record the adjusted guiding line position to the camera control unit.

**Up/Down adjustment range : -20 - 20**

**Left/Right adjustment range : -20 - 20**



**CAUTION:**

Never operate other function such as pressing BACK while writing index data.

If Confirmation/Adjustment mode does not function in the above procedure, perform one of the following service to adjust the index again.

- Remove battery for five min. Then reconnect battery.
- Remove camera control unit connector for five min. Then reconnect camera control unit connector.

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AV

# STEERING ANGLE SENSOR

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## STEERING ANGLE SENSOR

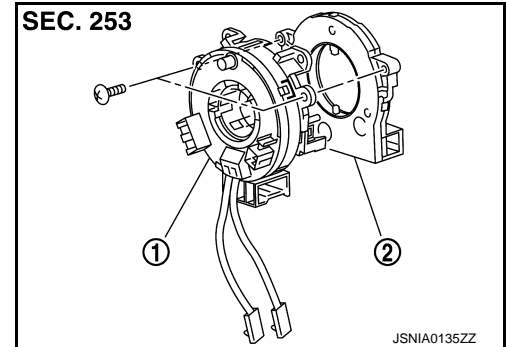
### Exploded View

INFOID:000000004929227

#### REMOVAL

Refer to [SR-14, "Exploded View"](#).

#### DISASSEMBLY



1. Spiral cable
2. Steering angle sensor

### Removal and Installation

INFOID:000000004929228

#### REMOVAL

1. Remove spiral cable.
2. Remove steering angle sensor from spiral cable.

#### INSTALLATION

Install in the reverse order of removal.

# TEL ADAPTER UNIT

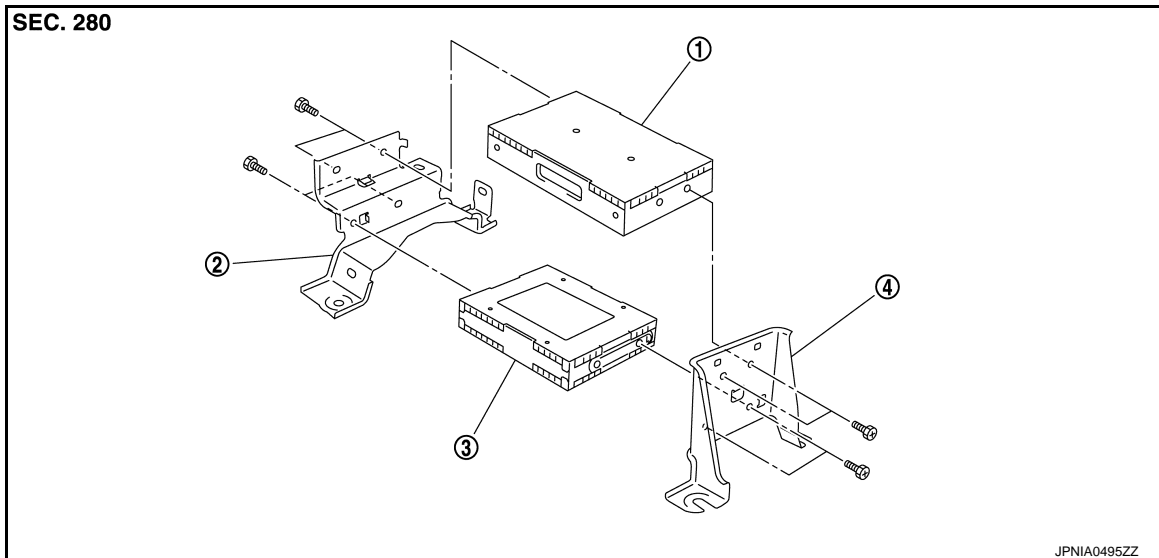
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## TEL ADAPTER UNIT

### Exploded View

INFOID:000000004371713



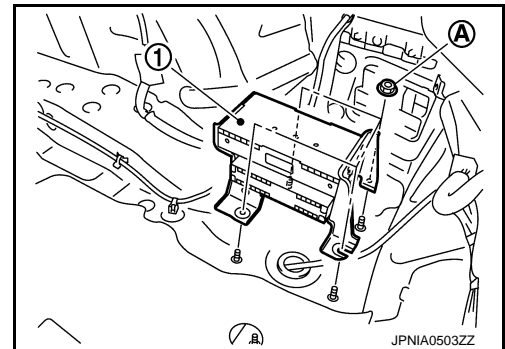
- 1. TEL adapter unit
- 2. Bracket (front)
- 3. Satellite radio tuner
- 4. Bracket (rear)

### Removal and Installation

INFOID:000000004371714

#### REMOVAL

1. Remove trunk floor spacer RH. Refer to [INT-23, "Exploded View"](#).
2. Remove nuts (A) from the trunk room RH, and remove TEL adapter unit and satellite radio tuner (1) from trunk room side.



#### INSTALLATION

Install in the reverse order of removal.

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# ANTENNA FEEDER (TEL)

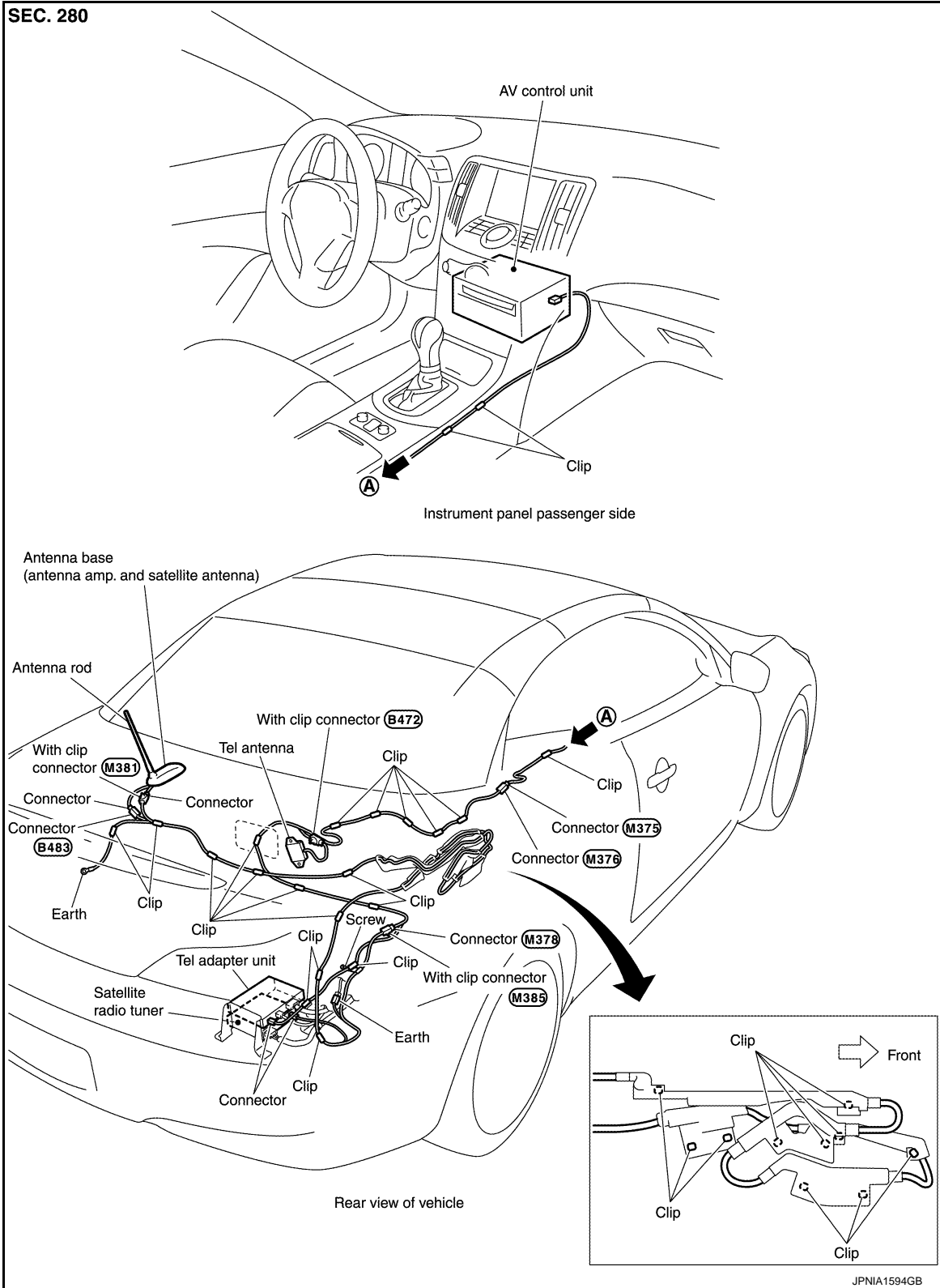
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITHOUT NAVIGATION]

## ANTENNA FEEDER (TEL)

### Harness Layout

INFOID:000000005096932



JPNIA1594GB



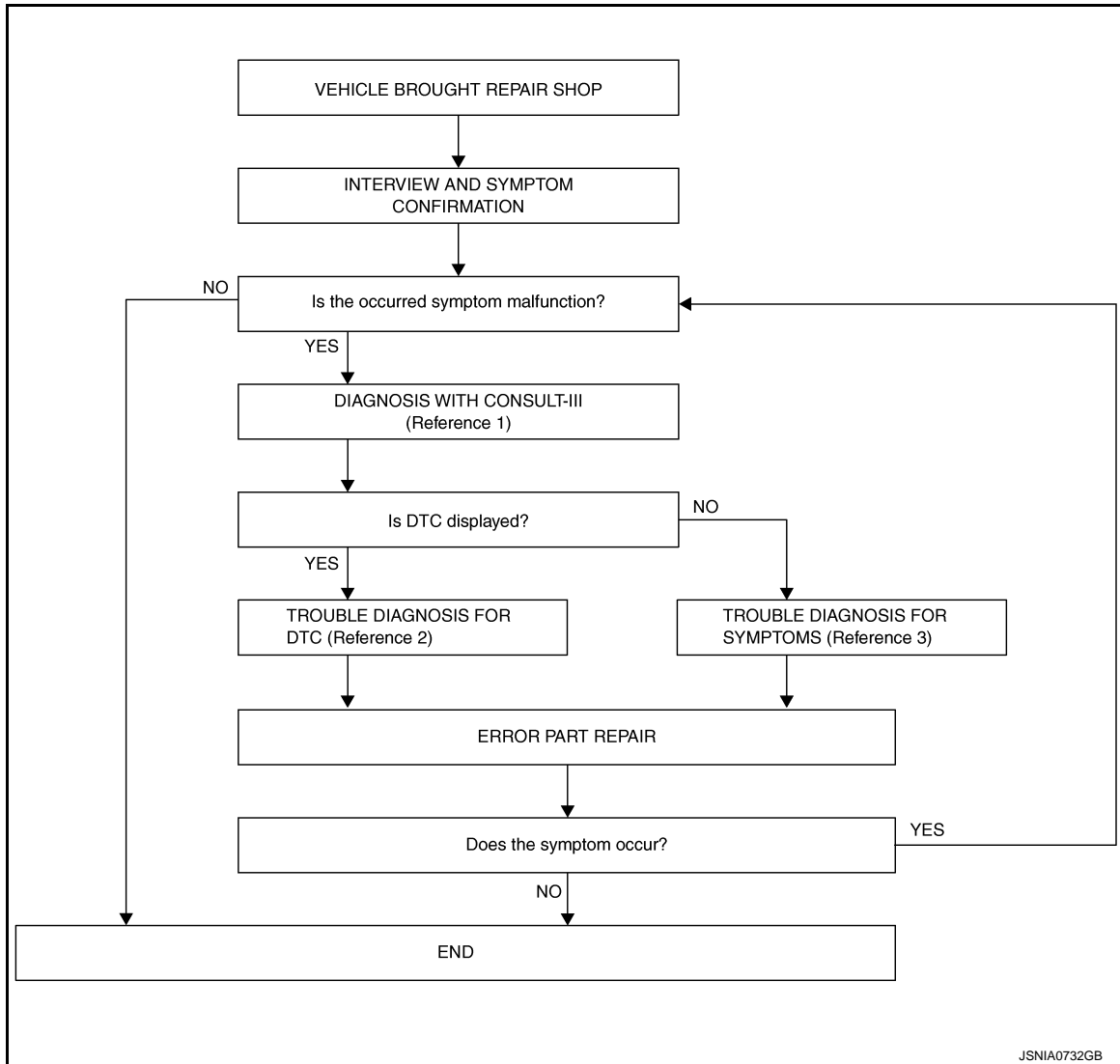
**BASIC INSPECTION**

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000004371718

OVERALL SEQUENCE



- Reference 1... Refer to [AV-519. "CONSULT - III Function \(MULTI AV\)".](#)
- Reference 2... Refer to [AV-622. "DTC Index".](#)
- Reference 3... Refer to [AV-725. "Symptom Table".](#)

DETAILED FLOW

**1. INTERVIEW AND SYMPTOM CONFIRMATION**

Check the malfunction symptoms by performing the following items.

- Interview the customer to obtain the malfunction information (conditions and environment when the malfunction occurred).
- Check the symptom.

Is the occurred symptom malfunction?

YES >> GO TO 2.

NO >> INSPECTION END

**2. DIAGNOSIS WITH CONSULT-III**

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# DIAGNOSIS AND REPAIR WORK FLOW

[BOSE AUDIO WITH NAVIGATION]

< BASIC INSPECTION >

1. Connect CONSULT-III and perform a self-diagnosis for "MULTI AV". Refer to [AV-519, "CONSULT - III Function \(MULTI AV\)"](#).

**NOTE:**

Skip to step 4 of the diagnosis procedure if "MULTI AV" is not displayed.

2. Check if any DTC is displayed in the self-diagnosis results.

Is DTC displayed?

YES >> GO TO 3.

NO >> GO TO 4.

## 3. TROUBLE DIAGNOSIS FOR DTC

---

1. Check the DTC indicated in the self-diagnosis results.
2. Perform the relevant diagnosis referring to the DTC Index. Refer to [AV-622, "DTC Index"](#).

>> GO TO 5.

## 4. TROUBLE DIAGNOSIS FOR SYMPTOMS

---

Perform the relevant diagnosis referring to the diagnosis chart by symptom. Refer to [AV-725, "Symptom Table"](#).

>> GO TO 5.

## 5. ERROR PART REPAIR

---

1. Repair or replace the identified malfunctioning parts.
2. Perform a self-diagnosis for "MULTI AV" with CONSULT-III.

**NOTE:**

Erase the stored self-diagnosis results after repairing or replacing the relevant components if any DTC has been indicated in the self-diagnosis results.

3. Check that the symptom does not occur.

Does the symptom occur?

YES >> GO TO 1.

NO >> INSPECTION END

# INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[BOSE AUDIO WITH NAVIGATION]

## INSPECTION AND ADJUSTMENT

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

#### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:000000004371719

Always correct the center position of the rear view monitor's possible route line after disconnecting the battery negative terminal.

#### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:000000004371720

#### 1. CORRECTION OF CENTER POSITION OF REAR VIEW MONITOR'S POSSIBLE ROUTE LINE

Refer to the following for details.

>> Refer to [AV-483, "REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement"](#).

### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

#### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000004371721

When camera control unit is replaced, the center position of rear view monitor possible route line is corrected.

#### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:000000004371722

#### 1. CORRECTION OF CENTER POSITION OF REAR VIEW MONITOR'S POSSIBLE ROUTE LINE

Refer to the following for details.

>> Refer to [AV-483, "REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement"](#).

### REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT

#### REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Description

INFOID:000000004371723

Adjust the center position of the possible route line of the rear view monitor if it is shifted.

#### REAR VIEW MONITOR POSSIBLE ROUTE LINE CENTER POSITION ADJUSTMENT : Special Repair Requirement

INFOID:000000004371724

#### 1. STEERING OPERATION

Steer the steering wheel to the leftmost and rightmost ends.

>> GO TO 2

#### 2. DRIVING

Drive the vehicle straight ahead 100 m (328.1 ft) or more at a speed of 30 km/h (18.6 MPH) or more.

>> END

# MULTI AV SYSTEM

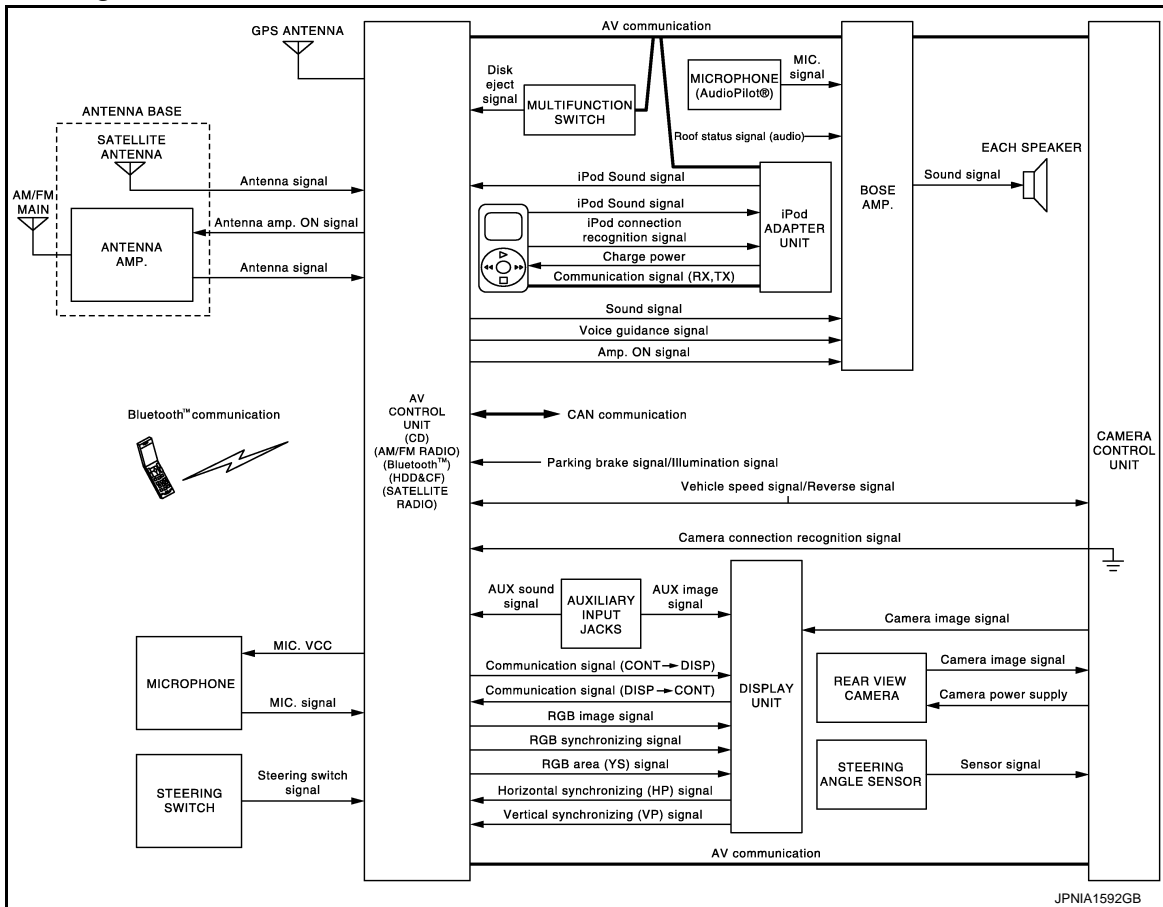
< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

## SYSTEM DESCRIPTION

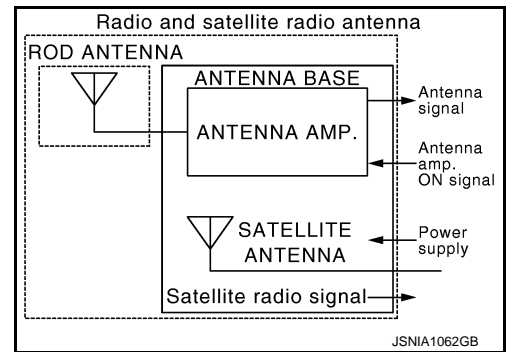
### MULTI AV SYSTEM

#### System Diagram



**NOTE:**

- The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.
- An antenna base integrated with radio antenna and satellite radio antenna is adopted.



#### System Description

INFOID:000000004371726

Multi AV system means that the following systems are integrated.

System name	System explanation
NAVIGATION SYSTEM	<a href="#">AV-489. "System Description"</a>
AUDIO SYSTEM	<a href="#">AV-494. "System Description"</a>
REAR VIEW MONITOR SYSTEM	<a href="#">AV-499. "System Description"</a>

# MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

System name	System explanation
VEHICLE INFORMATION SYSTEM	<ul style="list-style-type: none"> <li>Status of audio, climate control system, fuel economy, maintenance and navigation is displayed.</li> <li>AV control unit displays the fuel consumption status while receiving data signal through CAN communication from ECM and unified meter and A/C amp.</li> </ul>
HANDS-FREE PHONE SYSTEM	Refer to the following "HANDS-FREE PHONE SYSTEM".
AUXILIARY INPUT SYSTEM	Refer to the following "AUXILIARY INPUT SYSTEM".
VOICE RECOGNITION SYSTEM	Refer to the following "VOICE RECOGNITION SYSTEM".
TOUCH PANEL SYSTEM	Refer to the following "TOUCH PANEL SYSTEM".

- AV control unit function by transmitting/receiving data one by one with each unit (slave unit) that configures them completely as a master unit by connecting between units that configure MULTI AV system with two AV communication lines (H, L).
- Two AV communication lines (H, L) adopt a twisted pair line that is resistant to noise.
- AV control unit is connected by CAN communication, and it receives data signal from ECM, unified meter and A/C amp. It computes and displays fuel economy information value with the obtained information. Transmitting/receiving of data signal is performed by BCM. Also, it transmits the required signal of vehicle setting and receives the response signal.
- AV control unit is connected with display and serial communication, and it transmits the required signal of display and display control and receives the response signal from display.

**NOTE:**

AV control unit can perform CONSULT-III self-operating function and on board self-diagnosis.

- CONSULT-III self diagnosis: Refer to [AV-519. "CONSULT - III Function \(MULTI AV\)".](#)
- On board self diagnosis: Refer to [AV-502. "Diagnosis Description".](#)

## HANDS-FREE PHONE SYSTEM

- Hands-free communication can be operated by connecting using Bluetooth™ with cellular phone.
- Operation is performed by steering switch, and operating condition is indicated on display.
- Guide sound that is heard during operation is input from AV control unit to BOSE amp., and is output from door speaker.
- System operation is available only when the retractable hard top is closed.

### When A Call Is Originated

Spoken voice sound output from the microphone (Mic. Signal) is input to AV control unit. AV control unit outputs to cellular phone with Bluetooth™ communication as a TEL voice signal. Voice sound is then heard at the other party.

### When Receiving A Call

Voice sound is input to own cellular phone from the other party. TEL voice signal is output to door speaker, and the signal is input to BOSE amp. via AV control unit by establishing Bluetooth™ communication from cellular phone.

## AUXILIARY INPUT SYSTEM

- Image and sound can be output from an external device by connecting a device with auxiliary input jacks.
- Operation can be performed with multifunction switch and steering switch. Multifunction switch transmits operation signal to AV control unit by AV communication.

## VOICE RECOGNITION SYSTEM

- Each operation of multi AV system can be performed by inputting sound to microphone.
- Start of sound recognition system can be performed by steering switch.
- System operation is available only when the retractable hard top is closed.

## TOUCH PANEL SYSTEM

Each operation of multi AV system can be performed by directly touching a display.

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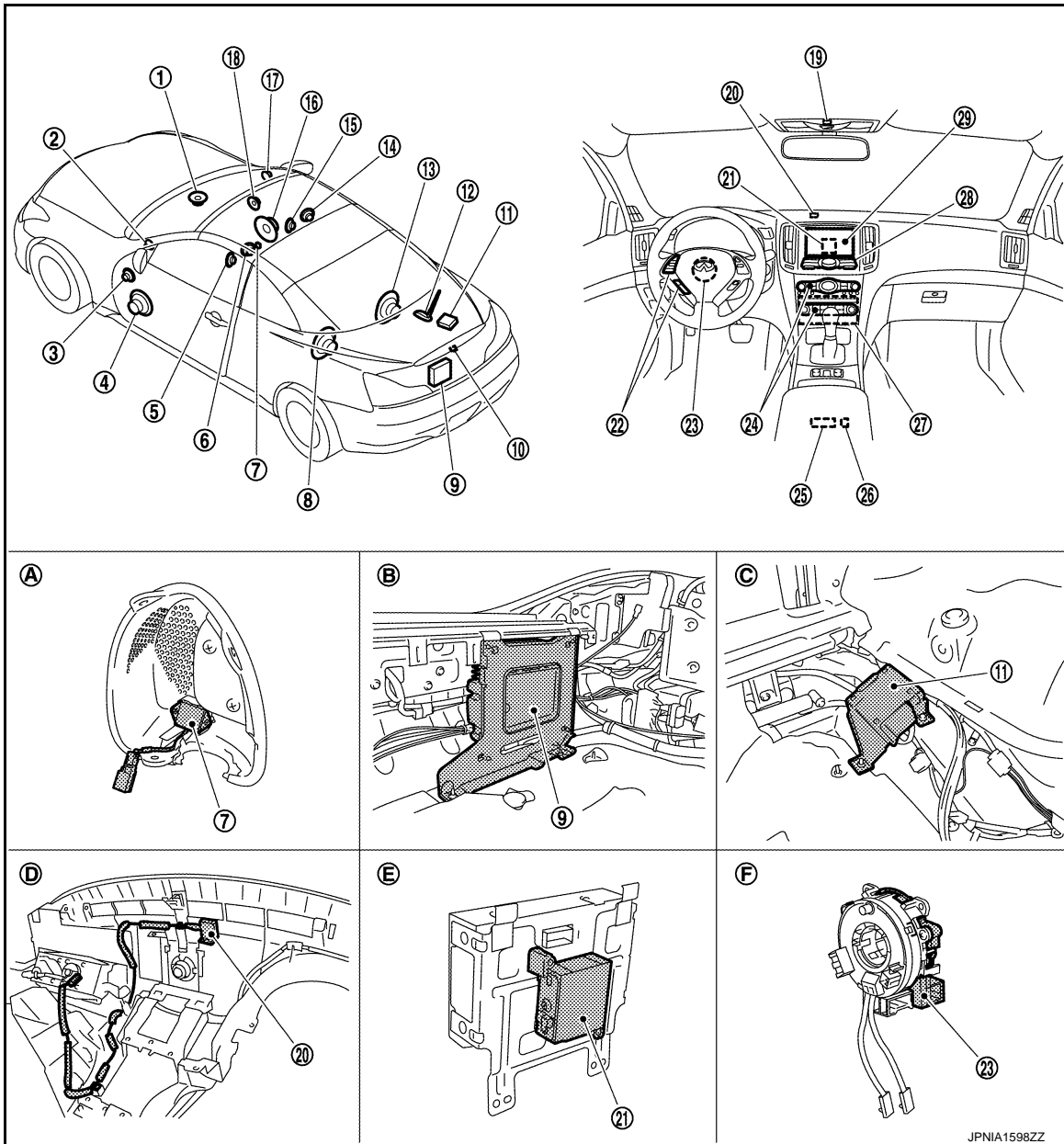
# MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

## Component Parts Location

INFOID:000000004371727



- |                                       |   |  |
|---------------------------------------|---|--|
| 1. Center speaker                     | 2. Tweeter LH                             | 3. Door squawker LH                                  |
| 4. Door woofer LH                     | 5. Driver headrest speaker LH             | 6. Driver headrest speaker RH                        |
| 7. Microphone (for AudioPilot®)       | 8. Rear woofer LH                         | 9. BOSE amp.   |
| 10. Rear view camera                  | 11. Camera control unit                   | 12. Antenna base (antenna amp and satellite antenna) |
| 13. Rear woofer RH                    | 14. Passenger headrest speaker RH         | 15. Passenger headrest speaker LH                    |
| 16. Door woofer RH                    | 17. Tweeter RH                            | 18. Door squawker RH                                 |
| 19. Microphone                        | 20. GPS antenna                           | 21. iPod adapter                                     |
| 22. Steering switch                   | 23. Steering angle sensor                 | 24. Preset switch                                    |
| 25. Auxiliary input jacks             | 26. iPod connector                        | 27. AV control unit                                  |
| 28. Multifunction switch              | 29. Display unit                          |  |
| A. Inner grille is removed condition. | B. Trunk rear plate is removed condition. | C. Trunk room RH                                     |
| D. Instrument panel rear side         | E. Rear view of the display unit          | F. Spiral cable part                                 |

JPNIA1598ZZ

# MULTI AV SYSTEM

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

## Component Description

INFOID:000000004371728

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>Integrates hard disk drive (HDD) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio, and vehicle information functions.</li> <li>It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> <li>Update of map data is performed with the CONSULT-III and the applicable cable.</li> </ul>
DISPLAY UNIT	<ul style="list-style-type: none"> <li>Display image is controlled by the serial communication from AV control unit.</li> <li>RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing). Auxiliary image signal is input from the auxiliary input jack. Camera image signal is input from camera control unit.</li> <li>Synchronize signal (HP, VP) is output to AV control unit.</li> <li>Touch panel function can be operated for each system by touching a display directly.</li> </ul>
BOSE AMP.	Inputs power (amp. ON) and sound signal from AV control unit, and outputs sound signal to each speaker.
DOOR WOOFER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs low-pitched sound.</li> </ul>
DOOR SQUAWKER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs midrange sound.</li> </ul>
TWEETER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs high range sound.</li> </ul>
CENTER SPEAKER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs mid range sounds.</li> </ul>
REAR WOOFER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs low-pitched sound.</li> </ul>
HEADREST SPEAKER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs midrange sound.</li> </ul>
MICROPHONE (for AudioPilot®)	<ul style="list-style-type: none"> <li>Used for AudioPilot®</li> <li>Mic.signal is transmitted to BOSE amp.</li> </ul>
MULTIFUNCTION SWITCH	<ul style="list-style-type: none"> <li>Operation panel is equipped with the centralized switch where audio, auxiliary input and navigation operations are integrated.</li> <li>Connected with preset switch via cable, and operation signal is transmitted to AV control unit via AV communication.</li> </ul>
PRESET SWITCH	<ul style="list-style-type: none"> <li>Operation panel is equipped with the centralized switch where audio and air conditioner operations are integrated.</li> <li>Connected with multifunction switch via cable, and operation signal is transmitted to AV control unit via AV communication.</li> <li>The CD ejection operating signal is performed by hardwire.</li> </ul>
CAMERA CONTROL UNIT	<ul style="list-style-type: none"> <li>Camera image signal is input from rear view camera. Camera image signal output to display.</li> <li>Power (camera ON signal) is transmitted to rear view camera.</li> <li>Controlled by AV communication transmitted from AV control unit.</li> <li>AV control unit recognizes the presence of camera system with camera connection recognition signal.</li> </ul>

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# MULTI AV SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Part name	Description
REAR VIEW CAMERA	The image of vehicle rear view is transmitted to camera control unit.
STEERING SWITCH	<ul style="list-style-type: none"><li>• Operations for audio, hands-free phone, audio response and navigation, etc. are possible.</li><li>• Steering switch signal (operation signal) is output to AV control unit.</li></ul>
STEERING ANGLE SENSOR	Sensor signal (steering angle) is transmitted to camera control unit.
MICROPHONE	<ul style="list-style-type: none"><li>• Used for hands-free phone operation and voice recognition.</li><li>• Mic signal is transmitted to AV control unit.</li><li>• Power (Mic VCC) is supplied from AV control unit.</li></ul>
AUXILIARY INPUT JACKS	Image signal of auxiliary input is transmitted to display, and sound signal is transmitted to AV control unit.
GPS ANTENNA	GPS signal is received and transmitted to AV control unit.
ANTENNA BASE	<p>An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.</p> <p>ANTENNA AMP.</p> <ul style="list-style-type: none"><li>• Radio signal received by rod antenna is amplified and transmitted to AV control unit.</li><li>• Power (antenna amp. ON signal) is supplied from AV control unit.</li></ul> <p>SATELLITE RADIO ANTENNA</p> <ul style="list-style-type: none"><li>• Receives the satellite radio waves and outputs it to AV control unit.</li></ul>
iPod ADAPTER	<ul style="list-style-type: none"><li>• Inputs iPod sound signal from iPod®, and outputs iPod sound signal to AV control unit.</li><li>• Receiving/transmitting of iPod® operation signals are performed as follows:<ul style="list-style-type: none"><li>- between AV control unit and iPod adapter: AV communication.</li><li>- between iPod® and iPod adapter: serial communication.</li></ul></li></ul>

iPod® is a trademark of Apple inc., registered in the U.S. and other countries.



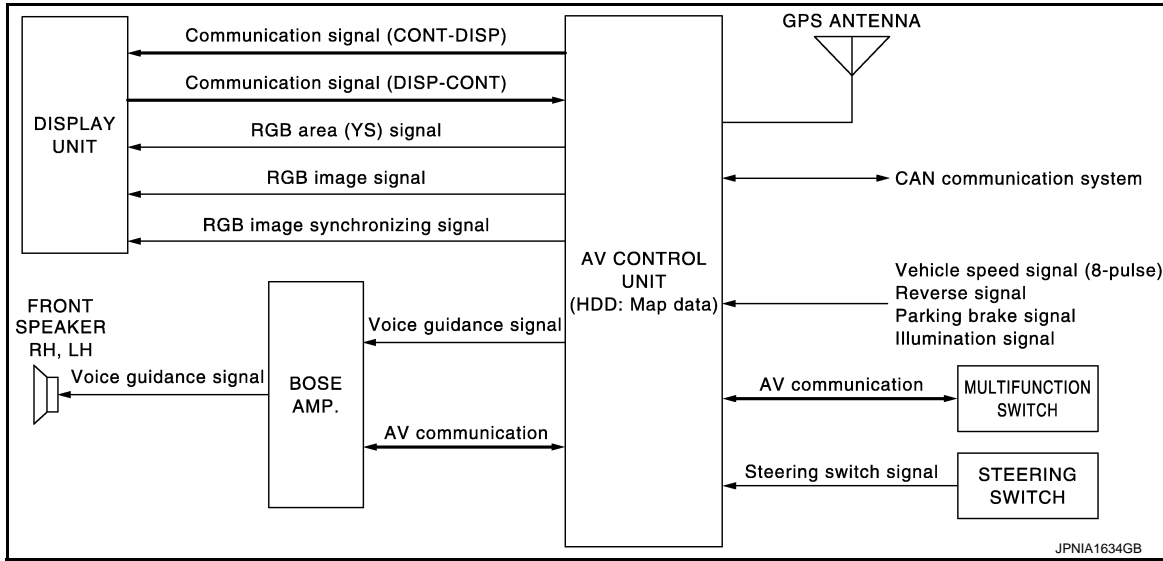
# NAVIGATION SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

## NAVIGATION SYSTEM

### System Diagram



### System Description

INFOID:000000004371730

#### DESCRIPTION

- The AV control unit controls navigation function while GPS tuner has built-in map data, GYRO (angle speed sensor), on the HDD (Hard Disk Drive).
- The AV control unit inputs operation signal with communication signal, through display (touch panel) and multifunction switch and steering switch.
- Guide sound is output to front speaker through BOSE amp. from AV control unit when operating navigation system.
- A vehicle position is calculated with the GYRO (angle speed sensor), vehicle sensor, signal from GPS satellite and map data stored on HDD (Hard Disk Drive), and transmits the map image signal (RGB image, RGB area, RGB image synchronizing) to the display.

#### POSITION DETECTION PRINCIPLE

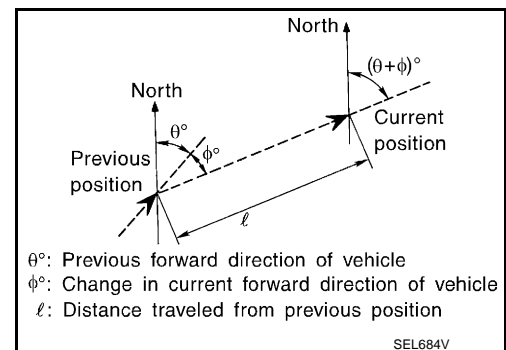
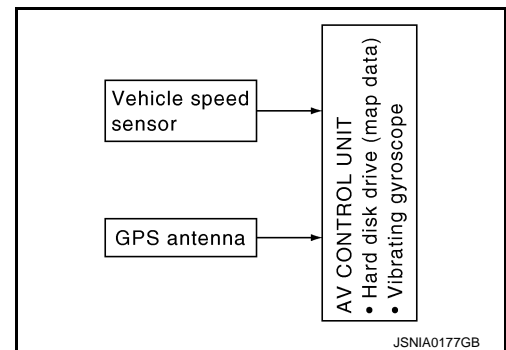
The navigation system periodically calculates the current vehicle position according to the following three types of signals.

- Travel distance of the vehicle as determined by the vehicle speed sensor
- Vehicle turning angle determined by the gyroscope (angular speed sensor)
- The travel direction of the vehicle determined by the GPS antenna (GPS information)

The current position of the vehicle is then identified by comparing the calculated vehicle position with map data, which is stored in the HDD (Hard Disk Drive) (map-matching), and indicated on the screen with a current location mark. More accurate data is used by comparing position detection results from GPS to the map-matching.

The current position is calculated by detecting the travel distance from the previous calculation point, and its direction change.

- Travel distance  
The travel distance is generated from the vehicle speed sensor input signal. The automatic distance correction function is adopted for preventing a miss-detection of the travel distance because of tire wear etc.
- Travel direction  
The gyroscope (angular velocity sensor) and GPS antenna (GPS information) generate the change of the travel direction. Both have advantages and disadvantages as per the following descriptions.



# NAVIGATION SYSTEM

< SYSTEM DESCRIPTION >

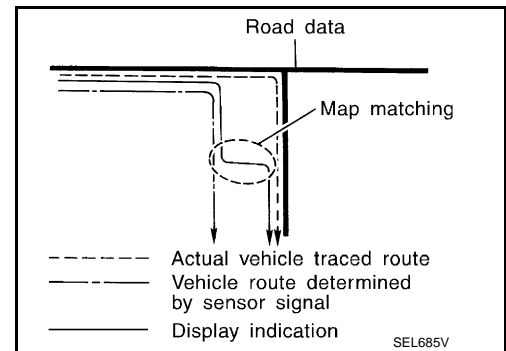
[BOSE AUDIO WITH NAVIGATION]

Type	Advantage	Disadvantage
Gyroscope (angular velocity sensor)	The turning angle is precisely detected.	Errors are accumulated when driving a long distance without stopping.
GPS antenna (GPS information)	The travel direction (North/South/East/West) is detected.	The travel direction is not precisely detected when driving slowly.

Input signals are prioritized in each situation. However, this order of priority may change in accordance with more detailed travel conditions so that the travel direction is detected more accurately.

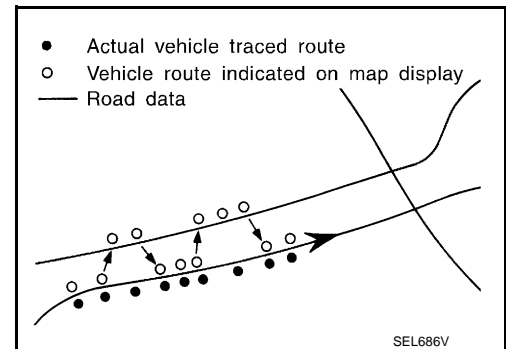
## MAP-MATCHING

Map-matching repositions the vehicle on the road map when a new location is judged to be more accurate. This is done by comparing the current vehicle position (calculated by the normal position detection method) from the map data stored in the HDD (Hard Disk Drive).



There is a possibility that the vehicle position may not be corrected in the following case, and when vehicle is driven over a certain distance or time in which GPS information is hard to receive. Correct manually the current location mark on the screen.

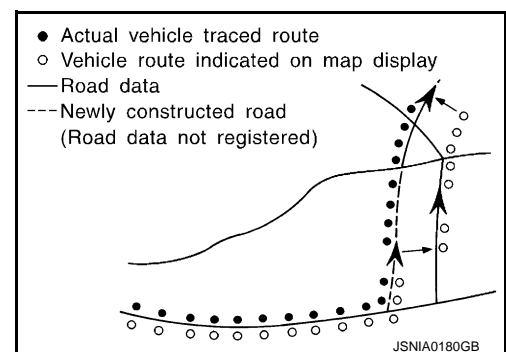
- In map-matching, several alternative routes are prepared and prioritized in addition to the road judged as currently driving on. Therefore, due to errors in the distance and/or direction, an incorrect road may be prioritized, and the current location mark may be repositioned to the incorrect road. If two roads are running in parallel, they are of the same priority. Therefore, the current location mark may appear on either of them alternately, depending on maneuvering of the steering wheel and configuration of the road, etc.



- Map-matching does not function correctly when road on which the vehicle is driving is new, etc. and not recorded in the map data. Also, map-matching does not function correctly when road pattern stored in the map data and the actual road pattern are different due to repair, etc.

Therefore, the map-matching function judges other road as a currently driving road if the road is not in the map, and displays the current location mark on it. Later, the current location mark may be repositioned to the road if the correct road is detected.

- Effective range for comparing the vehicle position and travel direction calculated by the distance and direction with the road data is limited. Therefore, correction by map-matching is not possible when there is an excessive gap between current vehicle position and the position on the map.



## GPS (GLOBAL POSITIONING SYSTEM)

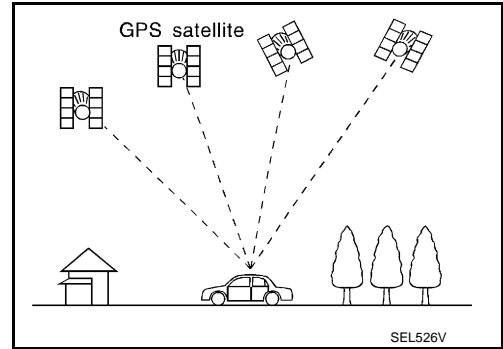
# NAVIGATION SYSTEM

## < SYSTEM DESCRIPTION >

## [BOSE AUDIO WITH NAVIGATION]

GPS (Global Positioning System) is developed for and is controlled by the US Department of Defense. The system utilizes GPS satellites (NAVSTAR), transmitting out radio waves while flying on an orbit around the earth at an altitude of approximately 21,000 km (13,049 mile).

The receiver calculates the travel position in three dimensions (latitude/longitude/altitude) according to the time lag of the radio waves that four or more GPS satellites transmit (three-dimensional positioning). The GPS receiver calculates the travel position in two dimensions (latitude/longitude) with the previous altitude data if the GPS receiver receives only three radio waves (two-dimensional positioning). GPS position correction is not performed while stopping the vehicle.



Accuracy of the GPS will deteriorate under the following conditions:

- In two-dimensional positioning, GPS accuracy will deteriorate when altitude of the vehicle position changes.
- The position of GPS satellite affects GPS detection precision. The position detection may not be precisely performed.
- The position detection is not performed if GPS receiver does not receive radio waves from GPS satellites. (Inside a tunnel, parking in a building, under an elevated highway etc.) GPS receiver may not receive radio waves from GPS satellites if any object is placed on the GPS antenna.

### NOTE:

- The detection result has an error of approximately 10 m (32.81 ft) even with a high-precision three dimensional positioning.
- There may be cases when the accuracy is lowered and radio waves are stopped intentionally because the GPS satellite signal is controlled by the US trace control center.

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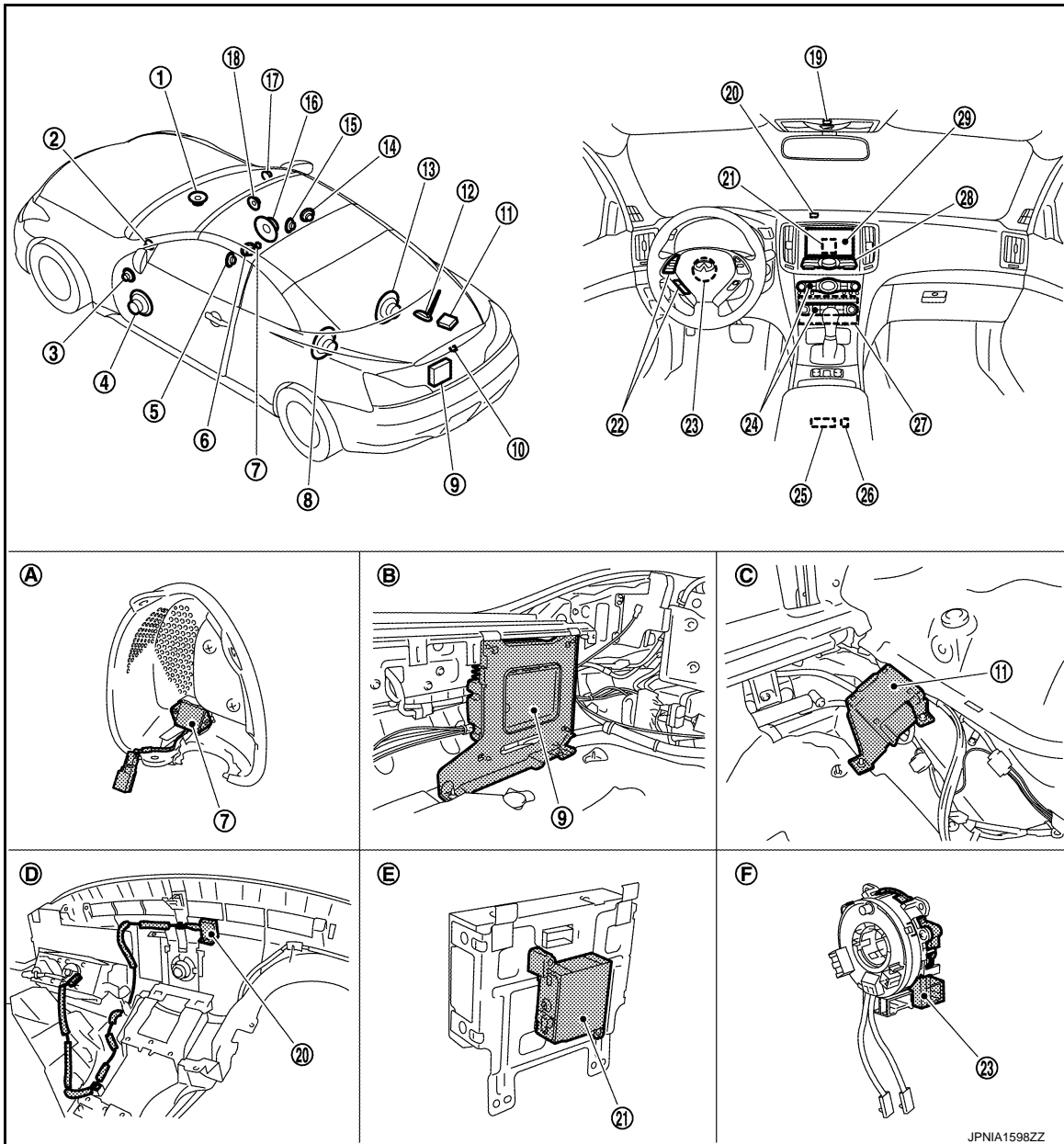
# NAVIGATION SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

## Component Parts Location

INFOID:000000004930969



- |                                       |   |  |
|---------------------------------------|---|--|
| 1. Center speaker                     | 2. Tweeter LH                             | 3. Door squawker LH                                  |
| 4. Door woofer LH                     | 5. Driver headrest speaker LH             | 6. Driver headrest speaker RH                        |
| 7. Microphone (for AudioPilot®)       | 8. Rear woofer LH                         | 9. BOSE amp.   |
| 10. Rear view camera                  | 11. Camera control unit                   | 12. Antenna base (antenna amp and satellite antenna) |
| 13. Rear woofer RH                    | 14. Passenger headrest speaker RH         | 15. Passenger headrest speaker LH                    |
| 16. Door woofer RH                    | 17. Tweeter RH                            | 18. Door squawker RH                                 |
| 19. Microphone                        | 20. GPS antenna                           | 21. iPod adapter                                     |
| 22. Steering switch                   | 23. Steering angle sensor                 | 24. Preset switch                                    |
| 25. Auxiliary input jacks             | 26. iPod connector                        | 27. AV control unit                                  |
| 28. Multifunction switch              | 29. Display unit                          |  |
| A. Inner grille is removed condition. | B. Trunk rear plate is removed condition. | C. Trunk room RH                                     |
| D. Instrument panel rear side         | E. Rear view of the display unit          | F. Spiral cable part                                 |

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# NAVIGATION SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

## Component Description

INFOID:000000004371732

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>It is the master unit that controls each operation of the Navigation system.</li> <li>The HDD (Hard Disk Drive) is built in, and the map data is stored in HDD.</li> <li>The RGB image signal (map information) is output to the display.</li> <li>The voice guidance signal is output to the BOSE amp.</li> </ul>
DISPLAY UNIT	<ul style="list-style-type: none"> <li>Map image signal is input from AV control unit, and it is indicated on the display.</li> <li>Each operation of navigation can be performed by the touch panel function.</li> </ul>
BOSE AMP.	Voice guidance signal is input from AV control unit, and it is output to front speakers and center speaker.
DOOR WOOFER	Voice guidance signal from BOSE amp. is output.
DOOR SQUAWKER	
TWEETER	
CENTER SPEAKER	
MULTIFUNCTION SWITCH	<ul style="list-style-type: none"> <li>Each operation of navigation can be performed.</li> <li>Connected with preset switch via cable and operation signal is transmitted to AV control unit via AV communication.</li> </ul>
STEERING SWITCH	<ul style="list-style-type: none"> <li>Each operation of navigation, etc. can be performed.</li> <li>Switch operating signal is output to AV control unit.</li> </ul>
GPS ANTENNA	GPS signal is received and is output to AV control unit.

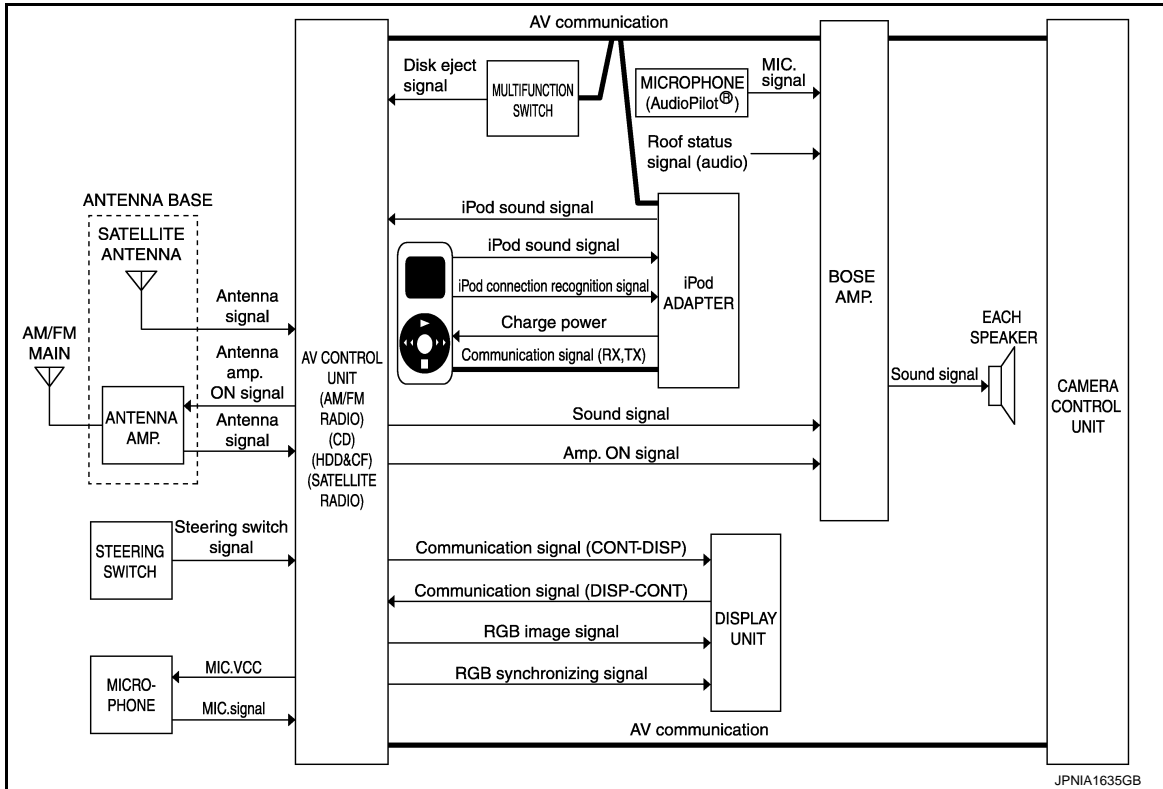
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## AUDIO SYSTEM

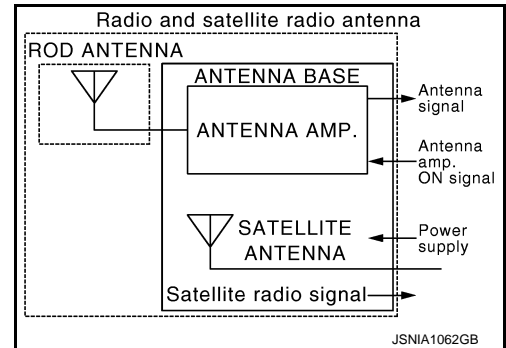
### System Diagram

INFOID:000000004371737



**NOTE:**

- The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.
- An antenna base integrated with radio antenna and satellite radio antenna is adopted.



### System Description

INFOID:000000004371738

The audio system is equipped with the following functions. Each function is operated with multifunction switch, preset switch, touch panel, steering switch or audio recognition. Operation status of AUDIO is indicated at display.

Function
AM/FM radio
Satellite radio
CD
Music Box (Hard Disk Drive)
CF (Compact Flash)
iPod connection

# AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Function
AudioPilot®
Sound equalizer automatic switching function

A

## FUNCTION DESCRIPTION

B

### Operating Signal

Audio system operation can be performed with multifunction switch, preset switch, steering switch, touch panel function or voice recognition function.

C

- Operating signal is transmitted to AV control unit with AV communication when it is operated by multifunction switch or preset switch. The CD ejection operating signal is performed by hardware.
- Operating signal is transmitted to AV control unit with steering switch signal when it is operated by steering switch.
- Refer to [AV-484. "System Description"](#) for explanation of voice recognition function and touch panel function.

D

### Screen Display

E

- Switching of display is performed with serial communication between display unit and AV control unit.
- The image signal to display operating condition is performed with RGB signal, RGB area signal and RGB image synchronizing signal.

F

### AM/FM Radio Mode

- AM/FM radio tuner is built into AV control unit.
- Audio signal is received by rod antenna, next it is amplified by antenna amp., and finally it is input to AV control unit. Audio signal is input to BOSE amp. and BOSE amp. outputs to each speaker.

G

### Satellite Radio Mode

- Satellite radio tuner is built into AV control unit.
- Audio signal (satellite radio) is received by satellite antenna, and it is input to AV control unit. AV control unit outputs audio signal to BOSE amp. The signal is also outputted from BOSE amp. to each speaker.

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### CD Mode

- CD function is built into AV control unit.
- AV control unit outputs audio signal to BOSE amp. and BOSE amp. outputs to each speaker when CD is inserted to AV control unit.

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### Music Box Mode

- Music CD data is stored on HDD that is built into AV control unit, and it can be played.
- AV control unit outputs music (audio signal) that is stored on HDD to BOSE amp., and BOSE amp. outputs to each speaker.

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### CF Mode

- AV control unit has built in CF replay function.
- Music (audio signal) that is stored in CF outputs to BOSE amp., and BOSE amp. outputs to each speaker when CF is inserted into AV control unit.

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### iPod Connection

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- Connect iPod® and iPod adapter with wire harness and iPod adapter input iPod sound signal from iPod®. When iPod mode is selected, iPod adapter output iPod sound signal to AV control unit. AV control unit output sound signal to BOSE amp., and BOSE amp. output sound signal to each speaker.
- Receiving/transmitting of iPod® operation signals are performed as follows:
  - between AV control unit and iPod adapter: AV communication.
  - between iPod® and iPod adapter: serial communication.
- The iPod® connection status can be recognized whether iPod adapter receives iPod connection recognition signal.
- The iPod adapter is possible to charge iPod®.

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iPod® is a trademark of Apple inc., registered in the U.S. and other countries.

### AudioPilot®

AudioPilot® is a sound improving system that picks up by a microphone in a driver headrest any noises or the sound of music coming into the vehicle, and that uses the BOSE amp. to revise the frequency feature of music in real time in response to the frequency feature of the noise while driving and listening to music.

# AUDIO SYSTEM

[BOSE AUDIO WITH NAVIGATION]

## < SYSTEM DESCRIPTION >

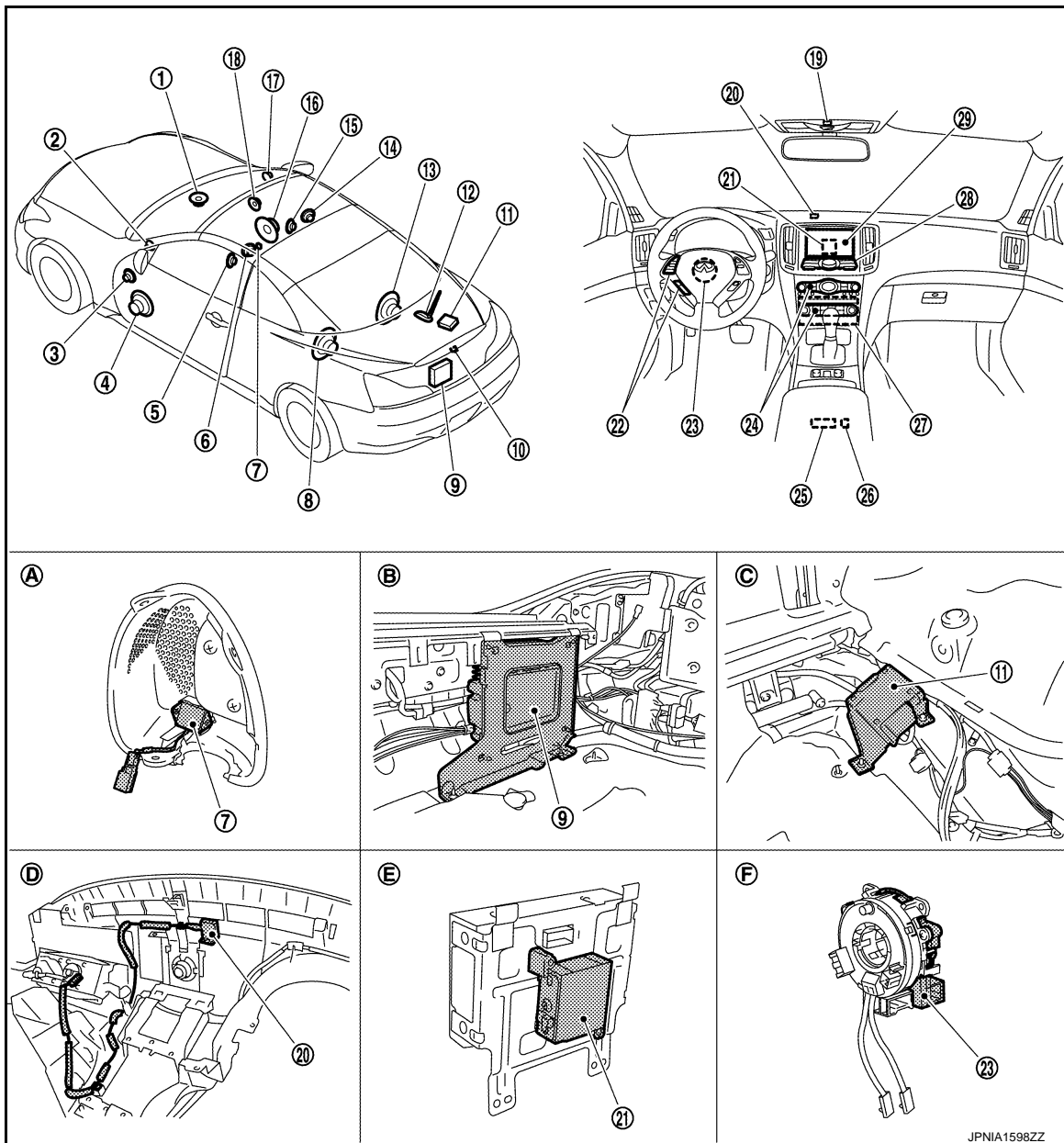
- If the low frequency area noise from the vehicle is loud, it adjusts the low frequency element of music to be larger than the vehicle noise.
- If the high frequency area noise from the vehicle is loud, it adjusts the high frequency element of music to be larger than the vehicle noise.
- If the vehicle noise is smaller than the setting volume, correction is not performed. This eliminates the vehicle noise when listening to music.

### Sound Equalizer Automatic Switching Function

Sound quality in a fully-open retractable hard top condition is improved by the correction for bringing the frequency characteristics in a fully-open retractable hard top condition closer to the characteristics in a fully-closed retractable hard top condition. When the retractable hard top is in a fully-open condition, sound pressure is reduced due to the absence of sound echo generated by sound reflection from the retractable hard top. BOSE amp. detects an open-close condition of the retractable hard top by receiving a roof status signal from the retractable hard top control unit and switches the equalizer to correct the frequency characteristics in a fully-open retractable hard top condition. During the switching of the equalizer, audio stops temporarily due to the temporary mute.

### Component Parts Location

INFOID:000000004930971





# AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

- |                                       |   |  |   |
|---------------------------------------|---|--|---|
| 1. Center speaker                     | 2. Tweeter LH                             | 3. Door squawker LH                                  | A |
| 4. Door woofer LH                     | 5. Driver headrest speaker LH             | 6. Driver headrest speaker RH                        |   |
| 7. Microphone (for AudioPilot®)       | 8. Rear woofer LH                         | 9. BOSE amp.   |   |
| 10. Rear view camera                  | 11. Camera control unit                   | 12. Antenna base (antenna amp and satellite antenna) | B |
| 13. Rear woofer RH                    | 14. Passenger headrest speaker RH         | 15. Passenger headrest speaker LH                    |   |
| 16. Door woofer RH                    | 17. Tweeter RH                            | 18. Door squawker RH                                 | C |
| 19. Microphone                        | 20. GPS antenna                           | 21. iPod adapter                                     |   |
| 22. Steering switch                   | 23. Steering angle sensor                 | 24. Preset switch                                    |   |
| 25. Auxiliary input jacks             | 26. iPod connector                        | 27. AV control unit                                  | D |
| 28. Multifunction switch              | 29. Display unit                          |  |   |
| A. Inner grille is removed condition. | B. Trunk rear plate is removed condition. | C. Trunk room RH                                     | E |
| D. Instrument panel rear side         | E. Rear view of the display unit          | F. Spiral cable part                                 |   |

## Component Description

INFOID:000000004371740

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>Receiving function of AM/FM/satellite radio, replaying function of CD, replaying/saving function of music box (HDD), replaying function of CF and voice recognition function are integrated.</li> <li>Audio signal is output to BOSE amp. from each function.</li> </ul>
DISPLAY UNIT	<ul style="list-style-type: none"> <li>Display image is controlled by the serial communication from AV control unit.</li> <li>RGB image signal (audio operation condition) is input from AV control unit.</li> <li>Touch panel function can be operated for each system by touching a display directly.</li> </ul>
BOSE AMP.	<ul style="list-style-type: none"> <li>Inputs power (amp. ON) and sound signal from AV control unit, and outputs sound signal to each speaker.</li> <li>Inputs roof status signal (audio) from the retractable hard top control unit.</li> </ul>
DOOR WOOFER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs low-pitched sound.</li> </ul>
DOOR SQUAWKER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs midrange sound.</li> </ul>
TWEETER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs high range sound.</li> </ul>
CENTER SPEAKER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs mid range sounds.</li> </ul>
REAR WOOFER	<ul style="list-style-type: none"> <li>Outputs sound signal from woofer amp.</li> <li>Outputs low-pitched sound.</li> </ul>
HEADREST SPEAKER	<ul style="list-style-type: none"> <li>Outputs sound signal from BOSE amp.</li> <li>Outputs midrange sound.</li> </ul>
MICROPHONE (for AudioPilot®)	<ul style="list-style-type: none"> <li>Used for AudioPilot®</li> <li>Mic.signal is transmitted to BOSE amp.</li> </ul>
MULTIFUNCTION SWITCH	<ul style="list-style-type: none"> <li>Each audio operation can be operated.</li> <li>Connected with preset switch via cable, and operation signal is transmitted to AV control unit via AV communication.</li> </ul>
PRESET SWITCH	<ul style="list-style-type: none"> <li>Each audio operation can be operated.</li> <li>Connected with multifunction switch via cable, and operation signal is transmitted to AV control unit via AV communication.</li> <li>The CD ejection operating signal is performed by hardwire.</li> </ul>
STEERING SWITCH	<ul style="list-style-type: none"> <li>Each audio operation can be operated.</li> <li>Steering switch signal (operation signal) is output to AV control unit.</li> </ul>

## AUDIO SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Part name	Description
MICROPHONE	<ul style="list-style-type: none"><li>• It is used for voice activated operation</li><li>• Pronounced voice is converted to voice signal and transmitted to AV control unit.</li></ul>
ANTENNA BASE	<p>An antenna base integrated with radio antenna amp. and satellite radio antenna is adopted.</p> <p>ANTENNA AMP.</p> <ul style="list-style-type: none"><li>• Radio signal received by rod antenna is amplified and transmitted to AV control unit.</li><li>• Power (antenna amp. ON signal) is supplied from AV control unit.</li></ul> <p>SATELLITE RADIO ANTENNA</p> <ul style="list-style-type: none"><li>• Receives the satellite radio waves and outputs it to AV control unit.</li></ul>
iPod ADAPTER	<ul style="list-style-type: none"><li>• Inputs iPod sound signal from iPod®, and outputs iPod sound signal to AV control unit.</li><li>• Receiving/transmitting of iPod® operation signals are performed as follows:<ul style="list-style-type: none"><li>- between AV control unit and iPod adapter: AV communication.</li><li>- between iPod® and iPod adapter: serial communication.</li></ul></li></ul>

iPod® is a trademark of Apple inc., registered in the U.S. and other countries.

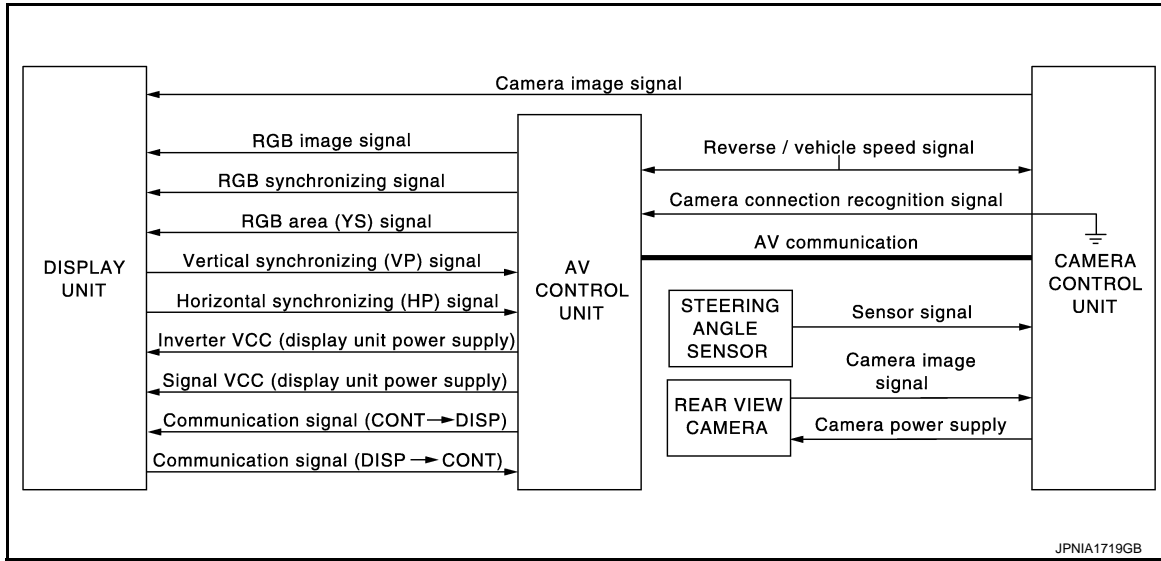
# REAR VIEW MONITOR SYSTEM

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

## REAR VIEW MONITOR SYSTEM

### System Diagram



### System Description

#### CAMERA IMAGE OPERATION PRINCIPLE

- Power is supplied to rear view camera from camera control unit and outputs camera image signal to camera control unit when selector lever is set to R position and the reverse signal on camera control unit is input.
- Camera control unit superimposes guide lines and possible route lines with camera image signal from rear view camera, and transmits camera image signal to the display. In this case, since the reverse signal is also input to AV control unit, the AV control unit recognizes the selector lever as in R position, and it switches communication signal between AV control unit and display unit, and image that is displayed on the display unit by RGB signal with rear view monitor image. In addition, possible route lines are controlled by original sensor signal from steering angle sensor.
- The AV control unit determines whether rear view camera is equipped or not, based on the presence of camera connection recognition signal. It switches to rear view monitor image at the time of reverse signal input when it is equipped.
- Warning message under the rear view monitor display is described by AV control unit.
- AV control unit is connected in communication with camera control unit and display unit, and it controls operation of rear view monitor system.

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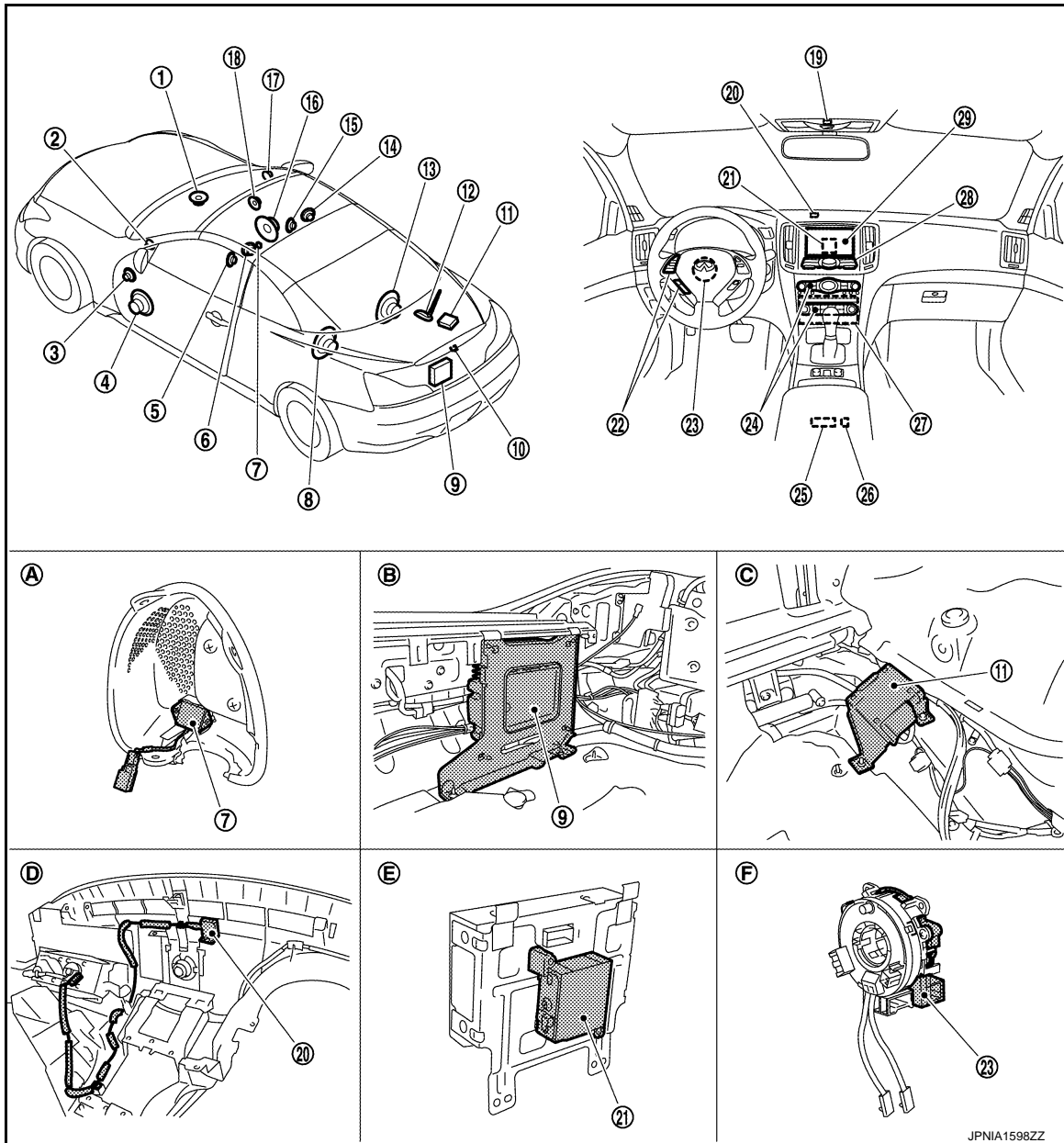
# REAR VIEW MONITOR SYSTEM

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

## Component Parts Location

INFOID:000000004930970



- |                                       |   |  |
|---------------------------------------|---|--|
| 1. Center speaker                     | 2. Tweeter LH                             | 3. Door squawker LH                                  |
| 4. Door woofer LH                     | 5. Driver headrest speaker LH             | 6. Driver headrest speaker RH                        |
| 7. Microphone (for AudioPilot®)       | 8. Rear woofer LH                         | 9. BOSE amp.   |
| 10. Rear view camera                  | 11. Camera control unit                   | 12. Antenna base (antenna amp and satellite antenna) |
| 13. Rear woofer RH                    | 14. Passenger headrest speaker RH         | 15. Passenger headrest speaker LH                    |
| 16. Door woofer RH                    | 17. Tweeter RH                            | 18. Door squawker RH                                 |
| 19. Microphone                        | 20. GPS antenna                           | 21. iPod adapter                                     |
| 22. Steering switch                   | 23. Steering angle sensor                 | 24. Preset switch                                    |
| 25. Auxiliary input jacks             | 26. iPod connector                        | 27. AV control unit                                  |
| 28. Multifunction switch              |   |  |
| A. Inner grille is removed condition. | B. Trunk rear plate is removed condition. | C. Trunk room RH                                     |
| D. Instrument panel rear side         | E. Rear view of the display unit          | F. Spiral cable part                                 |

JPNIA1598ZZ

# REAR VIEW MONITOR SYSTEM

[BOSE AUDIO WITH NAVIGATION]

< SYSTEM DESCRIPTION >

## Component Description

INFOID:000000004371736

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>Image on display is changed to rear view monitor image with serial communication between AV control unit and display unit.</li><li>Warning displayed in rear view monitor image is illustrated.</li></ul>
DISPLAY UNIT	<ul style="list-style-type: none"><li>Camera image signal is transmitted from camera control unit, and RGB image signal for warning display is transmitted from AV control unit.</li><li>Rear view monitor image is changed with the communication for AV control unit.</li></ul>
CAMERA CONTROL UNIT	<ul style="list-style-type: none"><li>Camera image signal is input from rear view camera, and camera image is indicated on the display.</li><li>Power (camera power supply) is transmitted to rear view camera.</li><li>Controlled by AV communication transmitted from AV control unit.</li><li>AV control unit recognizes the presence of camera system with camera connection recognition signal.</li></ul>
REAR VIEW CAMERA	The image of vehicle rear view is transmitted to camera control unit.
STEERING ANGLE SENSOR	Steering signal necessary for possible route line control is transmitted to camera control unit.

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# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

## DIAGNOSIS SYSTEM (AV CONTROL UNIT)

### Diagnosis Description

INFOID:000000004371741

#### MULTIFUNCTION SWITCH AND PRESET SWITCH SELF-DIAGNOSIS FUNCTION

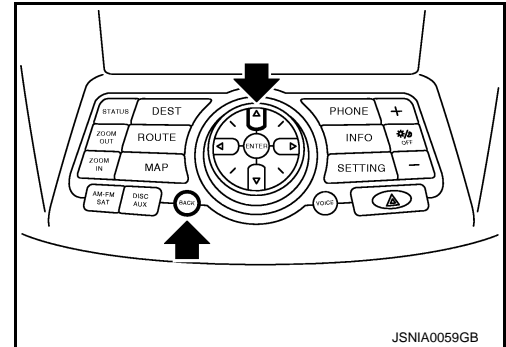
The ON/OFF operation (continuity) of each switch in the multifunction switch and preset switch can be checked.

##### Self-diagnosis mode

- Press the “BACK” switch and the “UP” switch of the 8-direction switches within 10 seconds after turning the ignition switch from OFF to ACC and hold them for 3 seconds or more. Then the buzzer sounds, all indicators of the preset switch illuminate, and the self-diagnosis mode starts.
- The continuity of each switch at the ON position can be checked by pressing the switch. The buzzer sounds if the switch is normal.

**CAUTION:**

**The hazard switch and CD eject switch cannot be checked.**



##### Finishing self-diagnosis mode

Self-diagnosis mode is canceled when turning the ignition switch OFF.

#### MULTI AV SYSTEM ON BOARD DIAGNOSIS FUNCTION

- The AV control unit diagnosis function starts up with multifunction switch operation and the AV control unit performs a diagnosis for each unit in the system during the on board diagnosis.
- Perform a CONSULT-III diagnosis if the on board diagnosis does not start, e.g., the screen does not display anything, the multifunction switch does not function, etc.

### ON BOARD DIAGNOSIS

#### Description

- The trouble diagnosis function has a self-diagnosis mode for conducting trouble diagnosis automatically and a confirmation/adjustment mode for operating manually.
- The self-diagnosis mode performs diagnoses on the AV control unit, connections between system components as well as connections between AV control unit and GPS antenna and between AV control unit and satellite radio antenna. Then it displays the diagnosis results on the display.
- The confirmation/adjustment mode allows the technician to check, modify or adjust the vehicle signals and set values, as well as to monitor the system error records and system communication status. The checking, modifying or adjusting generally require human intervention and judgment (the system cannot make judgment automatically).

#### On Board Diagnosis Item

Mode	Description
Self-Diagnosis	<ul style="list-style-type: none"><li>• AV control unit diagnosis</li><li>• Diagnoses the connections across system components, between AV control unit and GPS antenna and between AV control unit and satellite radio antenna.</li></ul>

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

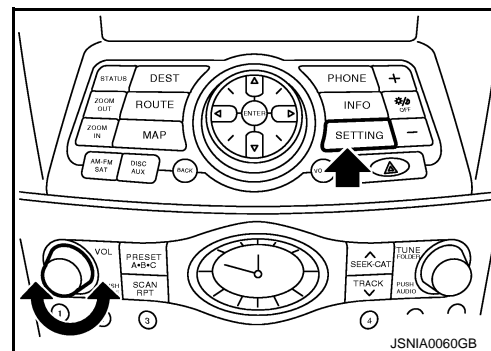
< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Mode		Description	
Confirmation/ Adjustment	Display Diagnosis	The following check functions are available: color tone check by color bar display, light and shade check by gray scale display and touch panel calibration response check.	
	Vehicle Signals	Diagnosis of signals can be performed for vehicle speed, parking brake, lights, ignition switch, and reverse.	
	Speaker Test	The connection of a speaker can be confirmed by test tone.	
	Climate Control	Start auto air conditioner system self-diagnosis.	
	Navigation	Steering Angle Adjustment	When there is a difference between the actual turning angle and the vehicle mark turning angle, it can be adjusted.
		Speed Calibration	When there is a difference between the current location mark and the actual location, it can be adjusted.
		XM SAT Subscription Status	The XM NavTraffic subscription status can be checked.
	Error History	The system malfunction and the frequency when occurring in the past are displayed. When the malfunctioning item is selected, the time and place that the selected malfunction last occurred are displayed.	
	Synchronizer FES clock	–	
	Vehicle CAN Diagnosis	The transmitting/receiving of CAN communication can be monitored.	
	AV COMM Diagnosis	The communication condition of each unit of Multi AV system can be monitored.	
	Handsfree Phone	The received volume adjustment of hands-free phone, microphone speaker check, and erase memory can be performed.	
	Camera Cont.	The signal connected to camera control unit can be checked and the guiding line position that overlaps rear view camera image can be adjusted.	
	Bluetooth	The passkey and the device name can be checked and changed.	
	SAT	Change Channel	Any necessary channels required to receive traffic information from the satellite radio system can be set.
		Change Application ID	Any application ID's required to receive traffic information from the satellite radio system can be set.
		Diag	Not used.
	Delete Unit Connection Log	Erase the connection history of unit and error history.	
Initialize Settings	Initializes the AV control unit memory.		

## STARTING PROCEDURE

1. Start the engine.
2. Turn the audio system OFF.
3. While pressing the "SETTING" button, turn the volume control dial clockwise or counterclockwise for 40 clicks or more. (When the self-diagnosis mode is started, a short beep will be heard.)
  - Shifting from current screen to previous screen is performed by pressing "BACK" button.



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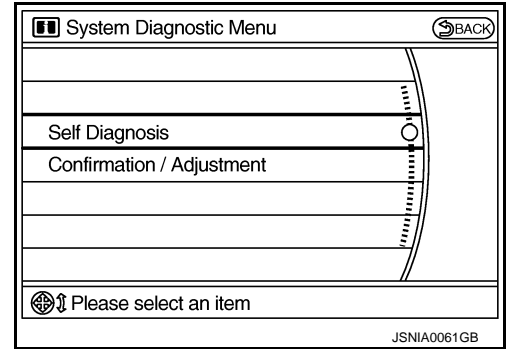
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# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

[BOSE AUDIO WITH NAVIGATION]

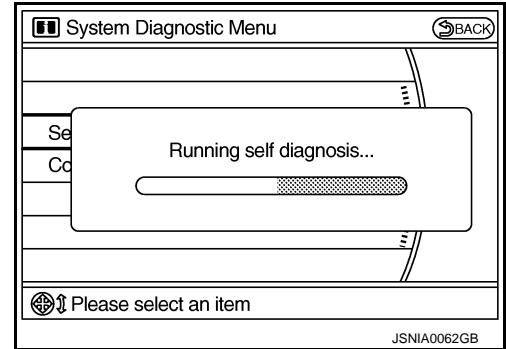
< SYSTEM DESCRIPTION >

- The trouble diagnosis initial screen is displayed, and then the items of "Self Diagnosis" and "Confirmation/Adjustment" can be selected.



## SELF-DIAGNOSIS MODE

- Start the self-diagnosis function and select "Self Diagnosis".
  - Self-diagnosis subdivision screen is displayed, and the self-diagnosis mode starts.
  - The bar graph visible on the center of the self-diagnosis subdivision screen indicates progress of the trouble diagnosis.

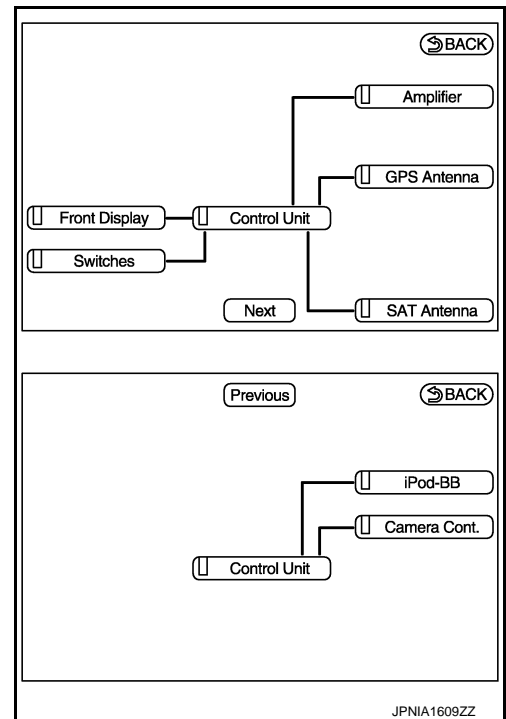


- Diagnosis results are displayed after the self-diagnosis is completed. The unit names and the connection lines are color-coded according to the diagnostic results.

Diagnosis results	Unit	Con- nection line
Normal	Green	Green
Connection malfunction	Gray	Yellow
Unit malfunction <sup>Note</sup>	Red	Green

### NOTE:

- Only the control unit (AV control unit) is displayed in red.
  - Replace AV control unit if "Self-Diagnosis did not run because of a control unit malfunction" is indicated. The symptom is AV control unit internal error. Refer to [AV-738. "Exploded View"](#).
- If multiple errors occur at the same time for a single unit, the screen switch colors are determined according to the following order of priority: red > gray.



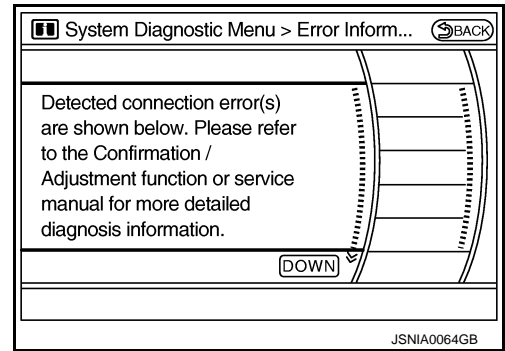


# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

- The comments of the self-diagnosis results can be viewed with a component in the diagnosis result screen.



## Detection Range of Self-diagnosis Mode

- The self-diagnosis mode allows the technician to diagnose the connection in the communication line between AV control unit and each unit and the internal operation of the AV control unit.
- Because the start condition of diagnosis function is a switch operation, the on board diagnosis function cannot be started up if any malfunction is detected in the communication circuit between AV control unit and multifunction switch.

## SELF-DIAGNOSIS RESULTS

Check the applicable display at the following table, and then repair the malfunctioning parts.

### Self-diagnosis Result Chart

Area with yellow connection lines	Description	Possible malfunction location / Action to take
<p>■ : Red</p> <p>JPNIA1610GB</p> <p><b>NOTE:</b> When a control unit malfunction is detected (red in unit display), connection malfunctions with other connection unit may be displayed.</p> <p>"Self-Diagnosis did not run because of a control unit malfunction"</p>	<ul style="list-style-type: none"> <li>• AV control unit malfunction is detected.</li> <li>• Malfunction is detected in AV control unit power supply and ground circuits.</li> </ul>	<p>Check AV control unit power supply and ground circuits. When detecting no malfunction in those components, replace AV control unit.</p>

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# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

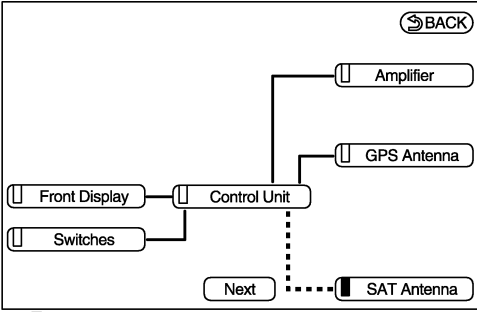
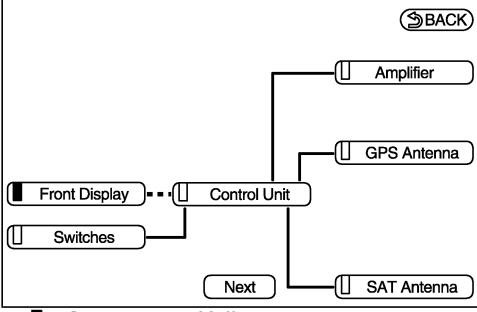
[BOSE AUDIO WITH NAVIGATION]

Area with yellow connection lines	Description	Possible malfunction location / Action to take
<p style="font-size: small;">■ : Red JP NIA1611GB</p>	<ul style="list-style-type: none"> <li>Sound signal circuits between BOSE amp. and each speaker is malfunctioning.</li> <li>BOSE amp. malfunction is detected.</li> </ul>	<ul style="list-style-type: none"> <li>Malfunctioning speaker circuits</li> <li>Replace BOSE amp.</li> </ul>
<p style="font-size: small;">■ : Gray    - - - - : Yellow JP NIA1614GB</p>	<ul style="list-style-type: none"> <li>BOSE amp. power supply and ground circuits are Malfunctioning.</li> <li>Malfunction is detected in AV communication circuits between iPod adapter and BOSE amp.</li> <li>AV communication signal between AV control unit and BOSE amp. is malfunctioning.</li> </ul>	<ul style="list-style-type: none"> <li>BOSE amp. power supply and ground circuits.</li> <li>AV communication circuits between iPod adapter and BOSE amp.</li> </ul>
<p style="font-size: small;">■ : Gray    - - - - : Yellow JS NIA0596GB</p>	<p>Malfunction is detected in camera connection recognition signal circuit.</p>	<p>Camera connection recognition signal circuit.</p>
<p style="font-size: small;">■ : Gray    - - - - : Yellow JP NIA1612GB</p>	<p>GPS antenna connection malfunction is detected.</p>	<p>GPS antenna.</p>

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Area with yellow connection lines	Description	Possible malfunction location / Action to take
 <p>■ : Gray    - - - - : Yellow</p> <p>JPNIA1613GB</p>	<p>Poor connection is detected in satellite radio antenna.</p>	<ul style="list-style-type: none"> <li>• Satellite radio antenna feeder.</li> <li>• Satellite radio antenna.</li> </ul>
 <p>■ : Gray    - - - - : Yellow</p> <p>JPNIA1615GB</p>	<ul style="list-style-type: none"> <li>• Malfunction is detected in communication circuit between AV control unit and display unit.</li> <li>• Malfunction is detected in communication signal between AV control unit and display unit.</li> </ul>	<p>Communication circuits between AV control unit and display unit.</p>

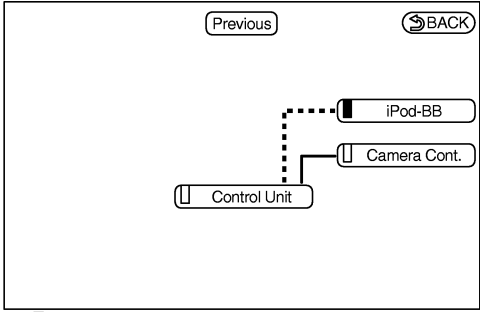
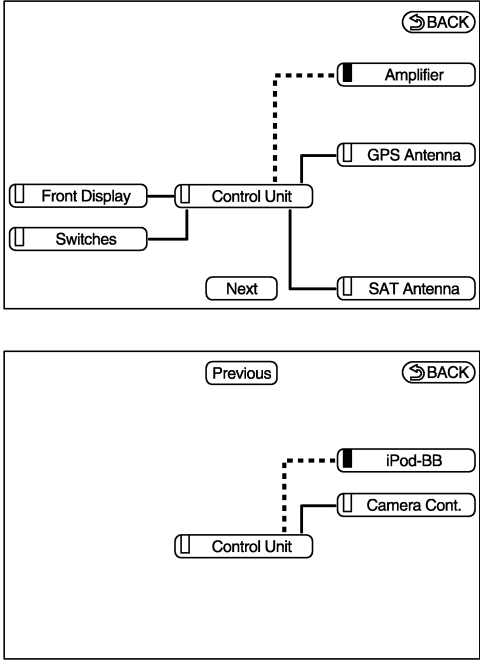
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# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

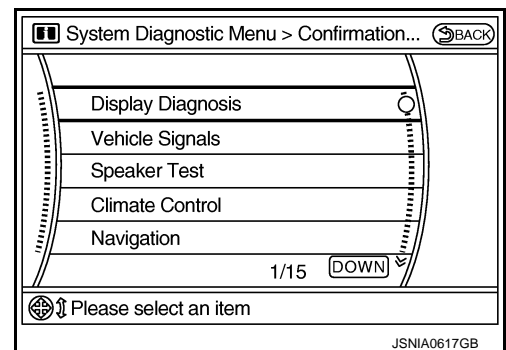
< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Area with yellow connection lines	Description	Possible malfunction location / Action to take
 <p>■ : Gray    - - - - : Yellow</p> <p>JSNIA0600GB</p>	<ul style="list-style-type: none"> <li>• iPod adapter power supply and ground circuits.</li> <li>• Malfunction is detected in AV communication circuits between multifunction switch and iPod adapter.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and iPod adapter.</li> </ul>	<ul style="list-style-type: none"> <li>• iPod adapter power supply and ground circuits.</li> <li>• AV communication circuits between multifunction switch and iPod adapter.</li> </ul>
 <p>■ : Gray    - - - - : Yellow</p> <p>JPNIA1718GB</p>	<p>Malfunction is detected in AV communication circuits between AV control unit and iPod adapter.</p>	<p>AV communication circuits between AV control unit and iPod adapter.</p>

## CONFIRMATION/ADJUSTMENT MODE

1. Start the diagnosis function and select "Confirmation/Adjustment". The "confirmation/adjustment" mode indicates where each item can be checked or adjusted.
2. Select each switch on the "Confirmation/Adjustment" mode screen to display the relevant trouble diagnosis screen. Press the "BACK" switch to return to the initial "Confirmation/Adjustment" mode screen.

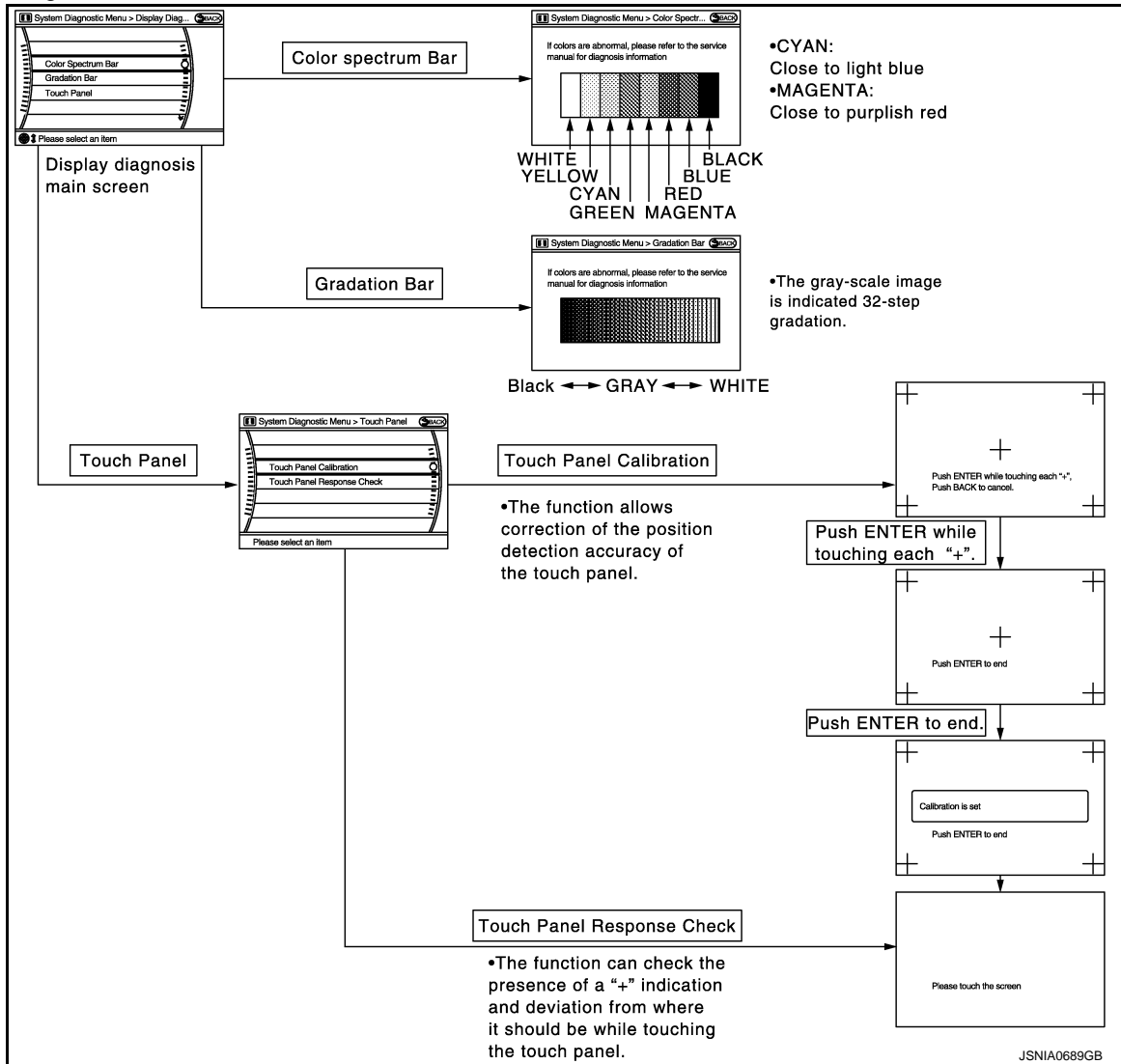


# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

## Display Diagnosis

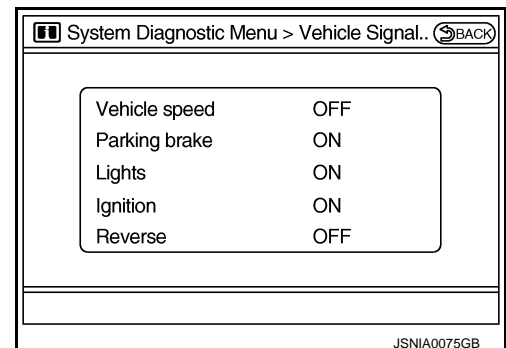


The tint of the color bar indication is as per the following list if RGB signal error is detected.

- R (red) signal error** : Light blue (Cyan) tint
- G (green) signal error** : Purple (Magenta) tint
- B (blue) signal error** : Yellow tint

### Vehicle Signals

A comparison check can be made of each actual vehicle signal and the signals recognized by the system.



# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Diagnosis item	Display	Vehicle status	Remarks
Vehicle speed	ON	Vehicle speed > 0 km/h (0 MPH)	Changes in indication may be delayed. This is normal.
	OFF	Vehicle speed = 0 km/h (0 MPH)	
Parking brake	ON	Parking brake is applied.	
	OFF	Parking brake is released.	
Lights	ON	Light switch ON	—
	OFF	Light switch OFF	—
Ignition	ON	Ignition switch ON	—
	OFF	Ignition switch in ACC position	—
Reverse	ON	Shift the selector lever to “R” position	Changes in indication may be delayed. This is normal.
	OFF	Shift the selector lever other than “R” position	

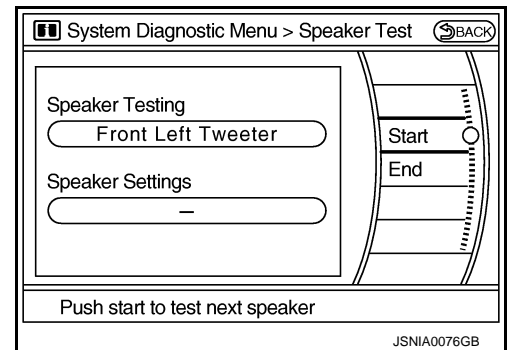
## Speaker Test

Select “Speaker Test” to display the speaker test screen. Press “Start” to generate a test tone in a speaker. Press “Start” again to generate a test tone in the next speaker. Press “End” to stop the test tones.

### NOTE:

The frequency of test tone emitted from each speaker is as follows.

<b>Tweeter</b>	<b>: 3 kHz</b>
<b>Front speaker</b>	<b>: 300 Hz</b>
<b>Rear speaker</b>	<b>: 1 kHz</b>



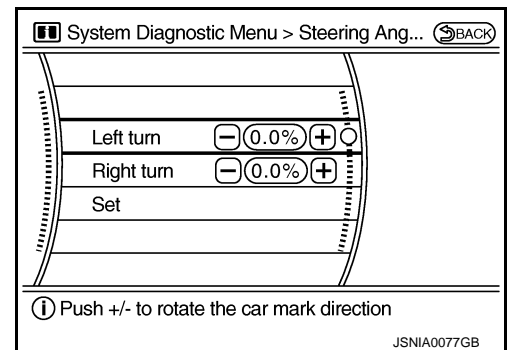
## Climate Control

Refer to “HEATER & AIR CONDITIONING CONTROL SYSTEM” for details.

## Navigation

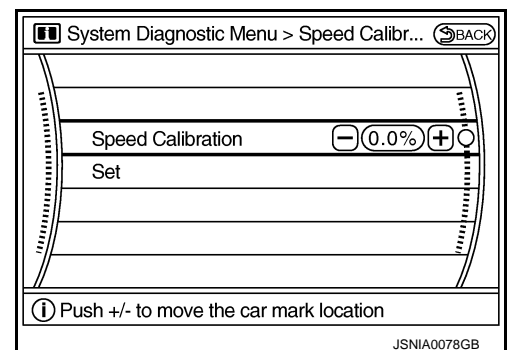
### STEERING ANGLE ADJUSTMENT

The steering angle output value detected with the gyroscope is adjusted.



### SPEED CALIBRATION

During normal driving, distance error caused by tire wear and tire pressure change is automatically adjusted for by the automatic distance correction function. This function, on the other hand, is for immediate adjustment, in cases such as driving with tire chain fitted on tires.



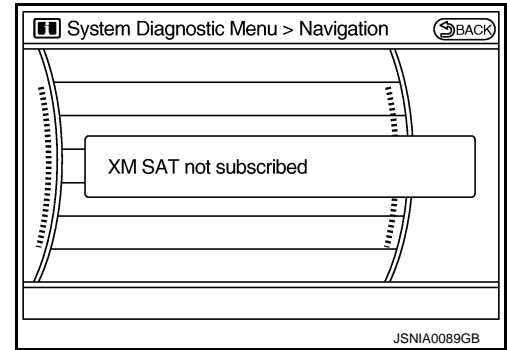
# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

## XM SAT SUBSCRIPTION STATUS

The XM NavTraffic subscription status can be checked.



## Error History

The self-diagnosis results are judged depending on whether any error occurs from when “Self-diagnosis” is selected until the self-diagnosis results are displayed.

However, the diagnosis results are judged normal if an error has occurred before the ignition switch is turned ON and then no error has occurred until the self-diagnosis start. Check the “Error Record” to detect any error that may have occurred before the self-diagnosis start because of this situation.

The error record displays the time and place of the most recent occurrence of that error. However, take note of the following points.

- If there is a malfunction with the GPS antenna circuit board in the AV control unit, the correct date and time of occurrence may not be able to be displayed.
- Place of the error occurrence is represented by the position of the current location mark at the time an error occurred. If current location mark has deviated from the correct position, then the place of the error occurrence cannot be located correctly.
- The frequency of occurrence is displayed in a count up manner. The actual count up method differs depending on the error item.

### Count up method A

- The counter resets to 0 if an error occurs when ignition switch is turned ON. The counter increases by 1 if the condition is normal at a next ignition switch ON cycle.
- The counter upper limit is 39. Any counts exceeding 39 are ignored. The counter can be reset (no error record display) with the “Delete log” switch or CONSULT-III.

### Count up method B

- The counter increases by 1 if an error occurs when ignition switch is ON. The counter will not decrease even if the condition is normal at the next ignition switch ON cycle.
- The counter upper limit is 50. Any counts exceeding 50 are ignored. The counter can be reset (no error record display) with the “Delete log” switch or CONSULT-III.

Display type of occurrence frequency	Error history display item
Count up method A	CAN communication line, control unit (CAN), AV communication line, control unit (AV)
Count up method B	Other than the above

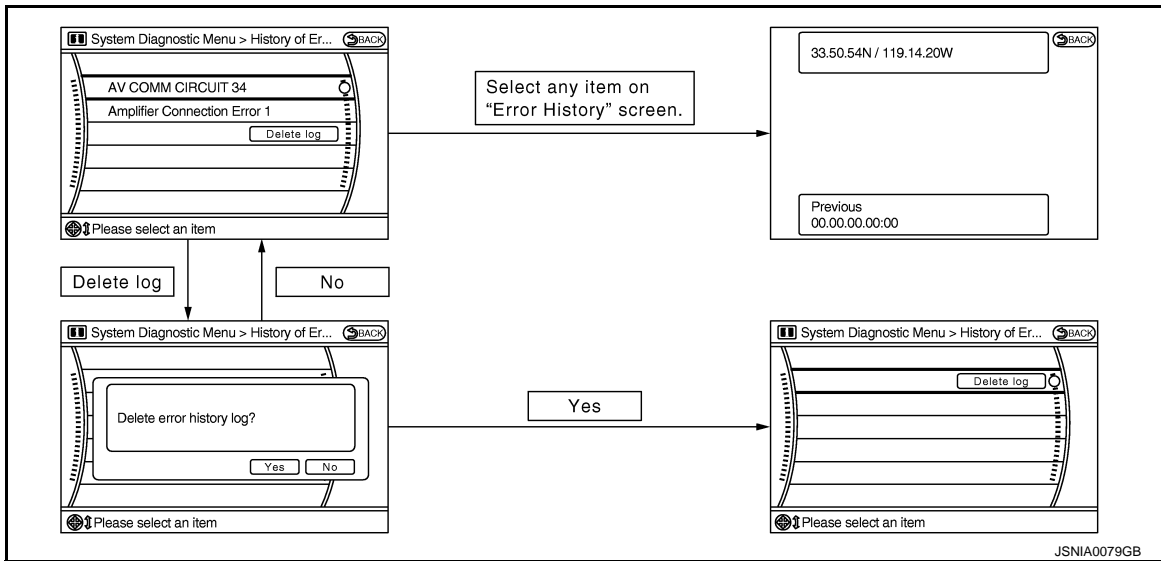
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AV

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]



## Error item

Some error items may be displayed simultaneously according to the cause. If some error items are displayed simultaneously, the detection of the cause can be performed by the combination of display items

Error item	Description	Possible malfunction factor/Action to take
CAN COMM CIRCUIT	CAN communication malfunction is detected.	Perform diagnosis with CONSULT-III, and then repair the malfunctioning parts according to the diagnosis results. Refer to <a href="#">AV-519, "CONSULT - III Function (MULTI AV)"</a> .
CONTROL UNIT (CAN)	CAN initial diagnosis malfunction is detected.	Replace the AV control unit.
CONTROL UNIT (AV)	AV communication circuit initial diagnosis malfunction is detected.	
FLASH-ROM Error Of Control Unit	AV control unit malfunction is detected.	
Connection Of Gyro		
XM SERIAL COMM Error		
CAN Controller Memory Error		
Bluetooth Module Connection Error		
HDD CONN Error		
HDD READ Error		
HDD WRITE Error		
HDD COMM Error		
HDD ACCESS Error		
DSP CONN Error	AV control unit power supply and ground circuits.	
DSP COMM Error		
Internal Communication Error		
GPS Communication Error		
GPS ROM Error	GPS malfunction is detected.	An intermittent error caused by strong radio interference may be detected unless any symptom (GPS reception error, etc.) occurs. Replace the AV control unit if the malfunction occurs constantly.
GPS RAM Error		
GPS RTC Error		
Amplifier Temperature Error		



# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
Front Display Connection Error	<ul style="list-style-type: none"> <li>• Display unit power supply and ground circuits malfunction is detected.</li> <li>• Malfunction is detected in communication circuits between AV control unit and display unit.</li> <li>• Malfunction is detected in communication signal between AV control unit and display unit.</li> </ul>	<ul style="list-style-type: none"> <li>• Display unit power supply and ground circuits.</li> <li>• Communication circuits between AV control unit and display unit.</li> </ul>
GPS Antenna Error	GPS antenna connection malfunction is detected.	GPS antenna.
Camera Control Unit Connection Error	Malfunction is detected in camera connection recognition circuit between AV control unit and camera control unit.	Camera connection recognition circuit between AV control unit and camera control unit.
XM Antenna Connection Error	Poor connection is detected in satellite radio antenna.	<ul style="list-style-type: none"> <li>• Satellite radio antenna feeder.</li> <li>• Satellite radio antenna.</li> </ul>
Center speaker OUT: open	Sound signal center speaker circuit is open.	Check sound signal center speaker circuit.
Center speaker OUT: short	Sound signal center speaker circuit is shorted between center speaker signal (+) and center speaker signal (-).	Check sound signal center speaker circuit.
Center speaker OUT: short to ground	Sound signal center speaker circuit to ground is shorted.	Check sound signal center speaker circuit.
Center speaker OUT: short to battery	Sound signal center speaker circuit to battery is shorted.	Check sound signal center speaker circuit.
FR speaker OUT: open	Sound signal front speaker RH circuit is open.	Check sound signal front speaker RH circuit.
FR speaker OUT: short	Sound signal front speaker RH circuit is shorted between front speaker RH signal (+) and front speaker RH signal (-).	Check sound signal front speaker RH circuit.
FR speaker OUT: short to ground	Sound signal front speaker RH circuit to ground is shorted.	Check sound signal front speaker RH circuit.
FR speaker OUT: short to battery	Sound signal front speaker RH circuit to battery is shorted.	Check sound signal front speaker RH circuit.
RR speaker OUT: open	Sound signal door woofer RH circuit is open.	Check sound signal door woofer RH circuit.
RR speaker OUT: short	Sound signal door woofer RH circuit is shorted between door woofer RH signal (+) and door woofer RH signal (-).	Check sound signal door woofer RH circuit.
RR speaker OUT: short to ground	Sound signal door woofer RH circuit to ground is shorted.	Check sound signal door woofer RH circuit.
RR speaker OUT: short to battery	Sound signal door woofer RH circuit to battery is shorted.	Check sound signal door woofer RH circuit.
RR SR-speaker OUT: open	Sound signal rear woofer RH circuit is open.	Check sound signal rear woofer RH circuit.
RR SR-speaker OUT: short	Sound signal rear woofer RH circuit is shorted between rear woofer RH signal (+) and rear woofer RH signal (-).	Check sound signal rear woofer RH circuit.
RR SR-speaker OUT: short to ground	Sound signal rear woofer RH circuit to ground is shorted.	Check sound signal rear woofer RH circuit.
RR SR-speaker OUT: short to battery	Sound signal rear woofer RH circuit to battery is shorted.	Check sound signal rear woofer RH circuit.
RL SR-speaker OUT: open	Sound signal rear woofer LH circuit is open.	Check sound signal rear woofer LH circuit.
RL SR-speaker OUT: short	Sound signal rear woofer LH circuit is shorted between rear woofer LH signal (+) and rear woofer LH signal (-).	Check sound signal rear woofer LH circuit.

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# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
RL SR-speaker OUT: short to ground	Sound signal rear woofer LH circuit to ground is shorted.	Check sound signal rear woofer LH circuit.
RL SR-speaker OUT: short to battery	Sound signal rear woofer LH circuit to battery is shorted.	Check sound signal rear woofer LH circuit.
RL speaker OUT: open	Sound signal door woofer LH circuit is open.	Check sound signal door woofer LH circuit.
RL speaker OUT: short	Sound signal door woofer LH circuit is shorted between door woofer LH signal (+) and door woofer LH signal (-).	Check sound signal door woofer LH circuit.
RL speaker OUT: short to ground	Sound signal door woofer LH circuit to ground is shorted.	Check sound signal door woofer LH circuit.
RL speaker OUT: short to battery	Sound signal door woofer LH circuit to battery is shorted.	Check sound signal door woofer LH circuit.
FL speaker OUT: open	Sound signal front speaker LH circuit is open.	Check sound signal front speaker LH circuit.
FL speaker OUT: short	Sound signal front speaker LH circuit is shorted between front speaker LH signal (+) and front speaker LH signal (-).	Check sound signal front speaker LH circuit.
FL speaker OUT: short to ground	Sound signal front speaker LH circuit to ground is shorted.	Check sound signal front speaker LH circuit.
FL speaker OUT: short to battery	Sound signal front speaker LH circuit to battery is shorted.	Check sound signal front speaker LH circuit.
FL seat SP(L) OUT: open	Sound signal driver headrest speaker LH circuit is open.	Check sound signal driver headrest speaker LH circuit.
FL seat SP(L) OUT: short	Sound signal driver headrest speaker LH circuit is shorted between driver headrest speaker LH signal (+) and driver headrest speaker LH signal (-).	Check sound signal driver headrest speaker LH circuit.
FL seat SP(L) OUT: short to ground	Sound signal driver headrest speaker LH circuit to ground is shorted.	Check sound signal driver headrest speaker LH circuit.
FL seat SP(L) OUT: short to battery	Sound signal driver headrest speaker LH circuit to battery is shorted.	Check sound signal driver headrest speaker LH circuit.
FL seat SP(R) OUT: open	Sound signal driver headrest speaker RH circuit is open.	Check sound signal driver headrest speaker RH circuit.
FL seat SP(R) OUT: short	Sound signal driver headrest speaker RH circuit is shorted between driver headrest speaker RH signal (+) and driver headrest speaker RH signal (-).	Check sound signal driver headrest speaker RH circuit.
FL seat SP(R) OUT: short to ground	Sound signal driver headrest speaker RH circuit to ground is shorted.	Check sound signal driver headrest speaker RH circuit.
FL seat SP(R) OUT: short to battery	Sound signal driver headrest speaker RH circuit to battery is shorted.	Check sound signal driver headrest speaker RH circuit.
FR seat SP(L) OUT: open	Sound signal passenger headrest speaker LH circuit is open.	Check sound signal passenger headrest speaker LH circuit.
FR seat SP(L) OUT: short	Sound signal passenger headrest speaker LH circuit is shorted between passenger headrest speaker LH signal (+) and passenger headrest speaker LH signal (-).	Check sound signal passenger headrest speaker LH circuit.
FR seat SP(L) OUT: short to ground	Sound signal passenger headrest speaker LH circuit to ground is shorted.	Check sound signal passenger headrest speaker LH circuit.
FR seat SP(L) OUT: short to battery	Sound signal passenger headrest speaker LH circuit to battery is shorted.	Check sound signal passenger headrest speaker LH circuit.
FR seat SP(R) OUT: open	Sound signal passenger headrest speaker RH circuit is open.	Check sound signal passenger headrest speaker RH circuit.

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
FR seat SP(R) OUT: short	Sound signal passenger headrest speaker RH circuit is shorted between passenger headrest speaker RH signal (+) and passenger headrest speaker RH signal (-).	Check sound signal passenger headrest speaker RH circuit.
FR seat SP(R) OUT: short to ground	Sound signal passenger headrest speaker RH circuit to ground is shorted.	Check sound signal passenger headrest speaker RH circuit.
FR seat SP(R) OUT: short to battery	Sound signal passenger headrest speaker RH circuit to battery is shorted.	Check sound signal passenger headrest speaker RH circuit.
Compensat. mic IN: open	Mic. signal (for AudioPilot®) circuit is open.	Check Mic. signal (for AudioPilot®) circuit.
Compensat. mic IN: short	Mic. signal (for AudioPilot®) circuit is shorted between MIC.signal (for AudioPilot®) (+) and MIC.signal (for AudioPilot®) (-).	Check Mic. signal (for AudioPilot®) circuit.
Compensat. mic IN: short to ground	Mic. signal (for AudioPilot®) circuit to ground is shorted.	Check Mic. signal (for AudioPilot®) circuit.
Compensat. mic IN: short to battery	Mic. signal (for AudioPilot®) circuit to battery is shorted.	Check Mic. signal (for AudioPilot®) circuit.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Internal Communication Error</li> </ul>	<ul style="list-style-type: none"> <li>• AV control unit power supply and ground circuits malfunction detected.</li> <li>• AV control unit malfunction is detected.</li> </ul>	AV control unit power supply and ground circuits.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Switches Connection Error</li> </ul>	<ul style="list-style-type: none"> <li>• Multifunction switch power supply and ground circuits malfunction is detected.</li> <li>• Malfunction is detected in AV communication circuit between AV control unit and multifunction switch.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and multifunction switch.</li> </ul>	<ul style="list-style-type: none"> <li>• Multifunction switch power supply and ground circuits.</li> <li>• AV communication circuit between AV control unit and multifunction switch.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Amplifier Connection Error</li> </ul>	BOSE amp. power supply and ground circuits are malfunctioning.	BOSE amp. power supply and ground circuits.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Rearview Camera Connection Error</li> </ul>	<ul style="list-style-type: none"> <li>• Camera control unit power supply and ground circuits malfunction is detected.</li> <li>• Malfunction is detected in AV communication circuit between BOSE amp. and camera control unit.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and camera control unit.</li> </ul>	<ul style="list-style-type: none"> <li>• Camera control unit power supply and ground circuits.</li> <li>• AV communication circuits between BOSE amp. and camera control unit.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• iPod Connection Error</li> </ul>	<ul style="list-style-type: none"> <li>• iPod adapter power supply and ground circuits malfunction is detected.</li> <li>• Malfunction is detected in AV communication circuits between multifunction switch and iPod adapter.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and iPod adapter.</li> </ul>	<ul style="list-style-type: none"> <li>• iPod adapter power supply and ground circuits.</li> <li>• AV communication circuits between multifunction switch and iPod adapter.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Rearview Camera Connection Error</li> <li>• Amplifier Connection Error</li> </ul>	Malfunction is detected in AV communication circuits between iPod adapter and BOSE amp.	AV communication circuits between iPod adapter and BOSE amp.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Rearview Camera Connection Error</li> <li>• iPod Connection Error</li> <li>• Amplifier Connection Error</li> </ul>	Malfunction is detected in AV communication circuits between multifunction switch and BOSE amp.	AV communication circuits between multifunction switch and BOSE amp.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT</li> <li>• Switches Connection Error</li> <li>• Rearview Camera Connection Error</li> <li>• iPod Connection Error</li> <li>• Amplifier Connection Error</li> </ul>	Malfunction is detected in AV communication circuits between AV control unit and multifunction switch.	AV communication circuits between AV control unit and multifunction switch.

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# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

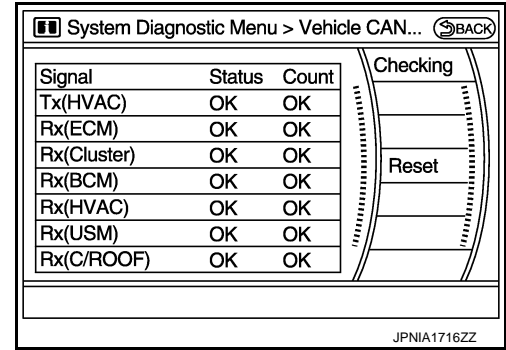
[BOSE AUDIO WITH NAVIGATION]

## < SYSTEM DESCRIPTION >

### Vehicle CAN Diagnosis

- CAN communication status and error counter is displayed.
- The error counter displays “OK” if any malfunction was not detected in the past and displays “0” if a malfunction is detected. It increases by 1 if the condition is normal at the next ignition switch ON cycle. The upper limit of the counter is 39.
- The error counter is erased if “Reset” is pressed.

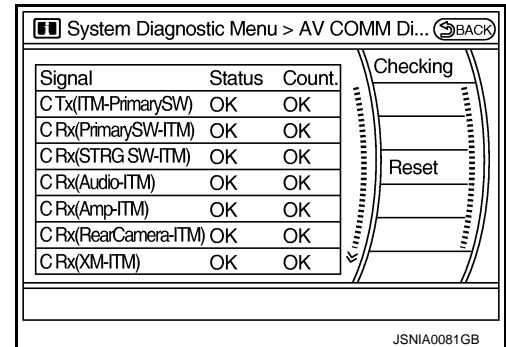
Items	Display (Current)	Malfunction counter (Past)
Tx (HVAC)	OK / UNKWN	OK / 0 – 39
Rx (ECM)	OK / UNKWN	OK / 0 – 39
Rx (Cluster)	OK / UNKWN	OK / 0 – 39
Rx (BCM)	OK / UNKWN	OK / 0 – 39
Rx (HVAC)	OK / UNKWN	OK / 0 – 39
Rx (USM)	OK / UNKWN	OK / 0 – 39
Rx (C/ROOF)	OK / UNKWN	OK / 0 – 39



### AV COMM Diagnosis

- Displays the communication status between AV control unit (master unit) and each unit.
- The error counter displays “OK” if any malfunction was not detected in the past and displays “0” if a malfunction is detected. It increases by 1 if the condition is normal at the next ignition switch ON cycle. The upper limit of the counter is 39.
- The error counter is erased if “Reset” is pressed.

Items	Status (Current)	Counter (Past)
C Tx(ITM-PrimarySW)	OK / UNKWN	OK / 0 – 39
C Rx(PrimarySW-ITM)	OK / UNKWN	OK / 0 – 39
C Rx(STRG SW-ITM)	OK / UNKWN	OK / 0 – 39
C Rx(Audio-ITM)	OK / UNKWN	OK / 0 – 39
C Rx(Amp-ITM)	OK / UNKWN	OK / 0 – 39
C Rx(RearCamera-ITM)	OK / UNKWN	OK / 0 – 39
C Rx(XM-ITM)	OK / UNKWN	OK / 0 – 39
C Rx(iPod-ITM)	OK / UNKWN	OK / 0 – 39
C Rx(Amp-Audio)	OK / UNKWN	OK / 0 – 39
C Rx(iPod-Audio)	OK / UNKWN	OK / 0 – 39
C Tx(Audio-ITM)	OK / UNKWN	OK / 0 – 39



#### NOTE:

- Any units with “—” displayed have no history of vehicle connection.
- “Audio” and “Amp” indicate the same status because “Amp” indicates the status of the amplifier integrated in the AV control unit.
- “STRG SW”, “Amp” and “XM” indicate the same status as “Audio”.

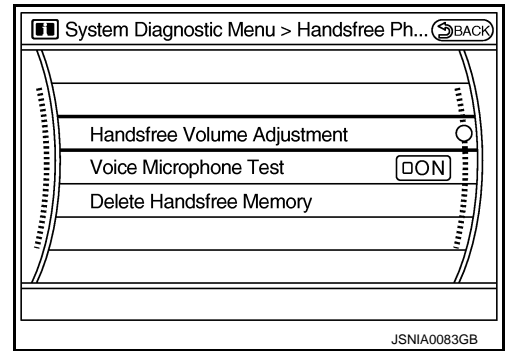
### Handsfree Phone

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

## < SYSTEM DESCRIPTION >

## [BOSE AUDIO WITH NAVIGATION]

The hands-free phone reception volume adjustment, microphone and speaker test, and memory erase functions are also available.

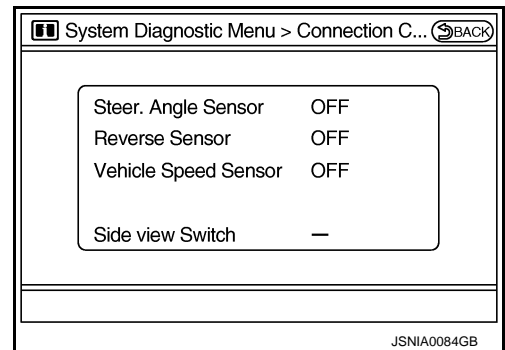


Camera Cont.

The two functions of “Connection Confirmation” and “Adjust Offset of Rear View Camera” are available.

### CONNECTION CONFIRMATION

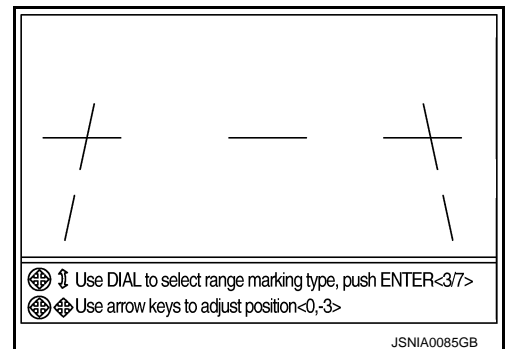
The steering angle sensor, reverse signal and vehicle speed sensor can be inspected.



Diagnosis item	Display	Vehicle status
Steer. Angle Sensor	ON	When steering the vehicle with ignition switch ON (remains ON until connection mode is stopped when it is turned ON)
	OFF	<ul style="list-style-type: none"> <li>Ignition switch at ACC</li> <li>No steering with ignition switch ON</li> </ul>
	—	Malfunction detected in camera connection recognition signal
Reverse Sensor	ON	Selector lever is in “R” with ignition switch ON.
	OFF	<ul style="list-style-type: none"> <li>Ignition switch at ACC</li> <li>Selector lever is in position other than “R” with ignition switch ON.</li> </ul>
	—	Malfunction detected in camera-connection recognition signal
Vehicle Speed Sensor	ON	Vehicle speed is more than 0 km/h (0 MPH) with ignition switch ON
	OFF	<ul style="list-style-type: none"> <li>Ignition switch at ACC</li> <li>Vehicle speed is 0 km/h (0 MPH) with ignition switch ON</li> </ul>
	—	Malfunction detected in camera connection recognition signal
Side view Switch	—	Not used

### ADJUST OFFSET OF REAR VIEW CAMERA

Use this mode to adjust the guide line display position of the rear-view monitor if necessary after removing the rear view monitor camera.



Bluetooth

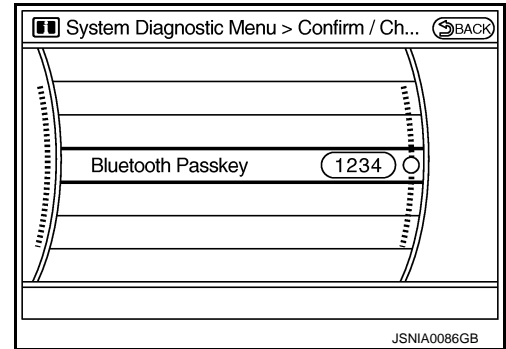
# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

[BOSE AUDIO WITH NAVIGATION]

## < SYSTEM DESCRIPTION >

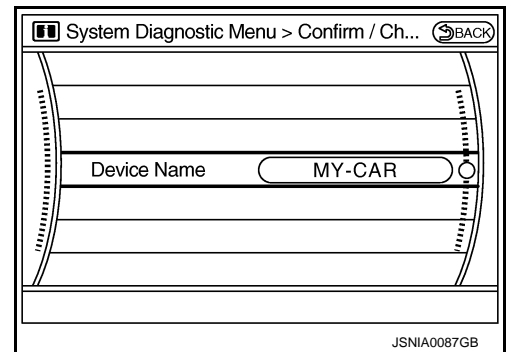
### Passkey confirmation/change

- The passkey of Bluetooth can be confirmed and changed.
- The passkey can be changed by four digits within 0 to 9.



### Device name check/change

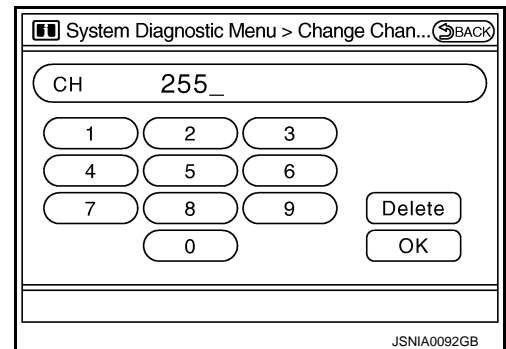
- The device name of Bluetooth can be confirmed and changed.
- The device name can be changed by sixteen digits within A to Z (small character can be used) and - (hyphen).



### SAT

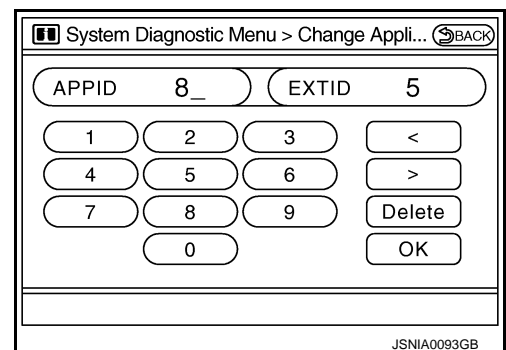
#### • Change Channel

- Any necessary channels required to receive traffic information from the satellite radio system can be set.



#### • Change Application ID

- Any application ID'-s required to receive traffic information from the satellite radio system can be set.



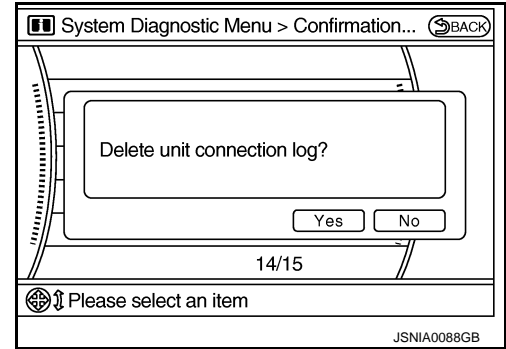
### Delete Unit Connection Log

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

[BOSE AUDIO WITH NAVIGATION]

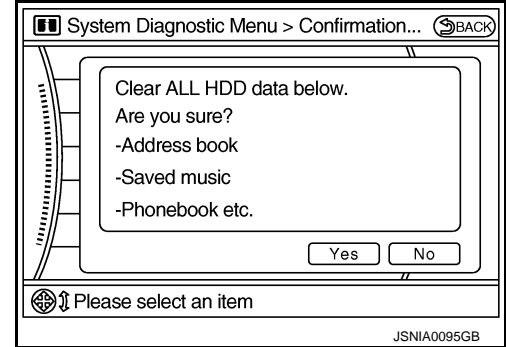
## < SYSTEM DESCRIPTION >

Deletes any unit connection records and error records from the AV control unit memory. (Clear the records of the unit that has been removed.)



### Initialize Settings

Deletes data stored in HDD.



## CONSULT - III Function (MULTI AV)

INFOID:000000004371742

### CONSULT-III FUNCTIONS

CONSULT-III performs the following functions via the communication with the AV control unit.

Diagnosis mode	Description
Ecu Identification	The part number of AV control unit can be checked.
Self Diagnostic Result	Performs a diagnosis on the AV control unit and a connection diagnosis for the communication circuit of the Multi AV system, and displays the current and past malfunctions collectively.
Data Monitor	The diagnosis of vehicle signal that is input to the AV control unit can be performed.

### AV COMMUNICATION

When "AV communication" of "CAN Diag Support Monitor" is selected, the following function will be performed.

AV communication	AV&NAVI C/U	Displays the communication status from AV control unit to each unit as well as the error counter.
	AUDIO	Displays the AV control unit communication status and the error counter.

### ECU IDENTIFICATION

The part number of AV control unit is displayed.

### SELF DIAGNOSIS RESULT

- In CONSULT-III self-diagnosis, self-diagnosis results and error history are displayed collectively.
- The current malfunction indicates "CRNT". The past malfunction indicates "PAST".
- The timing is displayed as "0" if any of the error codes [U1000], [U1010], [U1300] and [U1310] is detected. The counter increases by 1 if the condition is normal at the next ignition switch ON cycle.

Self-diagnosis results display item

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# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
CAN COMM CIRCUIT[U1000]	CAN communication malfunction is detected.	Perform diagnosis with CONSULT-III, and then repair the malfunctioning parts according to the diagnosis results. Refer to <a href="#">AV-525, "Diagnosis Procedure"</a> .
CONTROL UNIT (CAN) [U1010]	CAN initial diagnosis malfunction is detected.	Replace the AV control unit.
CONTROL UNIT (AV) [U1310]	AV communication circuit initial diagnosis malfunction is detected.	
Cont Unit FLASH-ROM [U1200]	AV control unit malfunction is detected.	
GYRO NO CONN [U1201]		
CAN CONT [U1216]		
BLUETOOTH MODULE CONN [U1217]		
HDD-CONN [U1218]		
HDD-READ [U1219]		
XM SERIAL COMM [U1220]		
HDD-WRITE [U121A]		
HDD-COMM [U121B]		
HDD-ACCESS [U121C]		
DSP CONN [U121D]		
DSP COMM [U121E]		
INTERNAL COMM [U121F]		
GPS COMM [U1204]	GPS malfunction is detected.	An intermittent error caused by strong radio interference may be detected unless any symptom (GPS reception error, etc.) occurs. Replace the AV control unit if the malfunction occurs constantly.
GPS ROM [U1205]		
GPS RAM [U1206]		
GPS RTC [U1207]		
AMP TEMP [U1231]	BOSE amp. malfunction is detected.	Replace the BOSE amp.
FRONT DISP CONN [U1243]	<ul style="list-style-type: none"> <li>• Display unit power supply and ground circuits malfunction is detected.</li> <li>• Malfunction is detected in communication circuits between AV control unit and display unit.</li> <li>• Malfunction is detected in communication signal between AV control unit and display unit.</li> </ul>	<ul style="list-style-type: none"> <li>• Display unit power supply and ground circuits.</li> <li>• Communication circuits between AV control unit and AV display unit.</li> </ul>
GPS ANTENNA CONN [U1244]	GPS antenna connection malfunction is detected.	GPS antenna.
CAMERA CONT. CONN [U1250]	Malfunction is detected in camera connection recognition circuit between AV control unit and camera control unit.	Camera connection recognition circuit between AV control unit and camera control unit.
XM ANTENNA CONN [U1258]	Poor connection is detected in satellite radio antenna.	<ul style="list-style-type: none"> <li>• Satellite radio antenna feeder.</li> <li>• Satellite radio antenna.</li> </ul>
CENTER SP OPEN [U1260]	Sound signal center speaker circuit is open.	Check sound signal center speaker circuit.
CENTER SP SHORT [U1261]	Sound signal center speaker circuit is shorted between center speaker signal (+) and center speaker signal (-).	Check sound signal center speaker circuit.
CENTER SP GND-SHORT [U1262]	Sound signal center speaker circuit to ground is shorted.	Check sound signal center speaker circuit.



# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

**[BOSE AUDIO WITH NAVIGATION]**

Error item	Description	Possible malfunction factor/Action to take
CENTER SP VB-SHORT [U1263]	Sound signal center speaker circuit to battery is shorted.	Check sound signal center speaker circuit.
FR-DOOR SP OPEN [U1264]	Sound signal front speaker RH circuit is open.	Check sound signal front speaker RH circuit.
FR-DOOR SP SHORT [U1265]	Sound signal front speaker RH circuit is shorted between front speaker RH signal (+) and front speaker RH signal (-).	Check sound signal front speaker RH circuit.
FR-DOOR SP GND-SHORT [U1266]	Sound signal front speaker RH circuit to ground is shorted.	Check sound signal front speaker RH circuit.
FR-DOOR SP VB-SHORT [U1267]	Sound signal front speaker RH circuit to battery is shorted.	Check sound signal front speaker RH circuit.
RR-SP/FR-WOOFER OPEN [U1268]	Sound signal door woofer RH circuit is open.	Check sound signal door woofer RH circuit.
RR-SP/FR-WOOFER SHORT [U1269]	Sound signal door woofer RH circuit is shorted between door woofer RH signal (+) and door woofer RH signal (-).	Check sound signal door woofer RH circuit.
RR-SP/FR-WOOFER GND-SHORT [U126A]	Sound signal door woofer RH circuit to ground is shorted.	Check sound signal door woofer RH circuit.
RR-SP/FR-WOOFER VB-SHORT [U126B]	Sound signal door woofer RH circuit to battery is shorted.	Check sound signal door woofer RH circuit.
RR-SURROUND SP OPEN [U126C]	Sound signal rear woofer RH circuit is open.	Check sound signal rear woofer RH circuit.
RR-SURROUND SP SHORT [U126D]	Sound signal rear woofer RH circuit is shorted between rear woofer RH signal (+) and rear woofer RH signal (-).	Check sound signal rear woofer RH circuit.
RR-SURROUND SP GND-SHORT [U126E]	Sound signal rear woofer RH circuit to ground is shorted.	Check sound signal rear woofer RH circuit.
RR-SURROUND SP VB-SHORT [U126F]	Sound signal rear woofer RH circuit to battery is shorted.	Check sound signal rear woofer RH circuit.
RL-SURROUND SP OPEN [U1274]	Sound signal rear woofer LH circuit is open.	Check sound signal rear woofer LH circuit.
RL-SURROUND SP SHORT [U1275]	Sound signal rear woofer LH circuit is shorted between rear woofer LH signal (+) and rear woofer LH signal (-).	Check sound signal rear woofer LH circuit.
RL-SURROUND SP GND-SHORT [U1276]	Sound signal rear woofer LH circuit to ground is shorted.	Check sound signal rear woofer LH circuit.
RL-SURROUND SP VB-SHORT [U1277]	Sound signal rear woofer LH circuit to battery is shorted.	Check sound signal rear woofer LH circuit.
RL-SP/FL-WOOFER OPEN [U1278]	Sound signal door woofer LH circuit is open.	Check sound signal door woofer LH circuit.
RL-SP/FL-WOOFER SHORT [U1279]	Sound signal door woofer LH circuit is shorted between door woofer LH signal (+) and door woofer LH signal (-).	Check sound signal door woofer LH circuit.
RL-SP/FL-WOOFER GND-SHORT [U127A]	Sound signal door woofer LH circuit to ground is shorted.	Check sound signal door woofer LH circuit.
RL-SP/FL-WOOFER VB-SHORT [U127B]	Sound signal door woofer LH circuit to battery is shorted.	Check sound signal door woofer LH circuit.
FL-DOOR SP OPEN [U127C]	Sound signal front speaker LH circuit is open.	Check sound signal front speaker LH circuit.
FL-DOOR SP SHORT [U127D]	Sound signal front speaker LH circuit is shorted between front speaker LH signal (+) and front speaker LH signal (-).	Check sound signal front speaker LH circuit.
FL-DOOR SP GND-SHORT [U127E]	Sound signal front speaker LH circuit to ground is shorted.	Check sound signal front speaker LH circuit.

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## DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
FL-DOOR SP VB-SHORT [U127F]	Sound signal front speaker LH circuit to battery is shorted.	Check sound signal front speaker LH circuit.
FL-SEAT L-SP OPEN [U1280]	Sound signal driver headrest speaker LH circuit is open.	Check sound signal driver headrest speaker LH circuit.
FL-SEAT L-SP SHORT [U1281]	Sound signal driver headrest speaker LH circuit is shorted between driver headrest speaker LH signal (+) and driver headrest speaker LH signal (-).	Check sound signal driver headrest speaker LH circuit.
FL-SEAT L-SP GND-SHORT [U1282]	Sound signal driver headrest speaker LH circuit to ground is shorted.	Check sound signal driver headrest speaker LH circuit.
FL-SEAT L-SP VB-SHORT [U1283]	Sound signal driver headrest speaker LH circuit to battery is shorted.	Check sound signal driver headrest speaker LH circuit.
FL-SEAT R-SP OPEN [U1284]	Sound signal driver headrest speaker RH circuit is open.	Check sound signal driver headrest speaker RH circuit.
FL-SEAT R-SP SHORT [U1285]	Sound signal driver headrest speaker RH circuit is shorted between driver headrest speaker RH signal (+) and driver headrest speaker RH signal (-).	Check sound signal driver headrest speaker RH circuit.
FL-SEAT R-SP GND-SHORT [U1286]	Sound signal driver headrest speaker RH circuit to ground is shorted.	Check sound signal driver headrest speaker RH circuit.
FL-SEAT R-SP VB-SHORT [U1287]	Sound signal driver headrest speaker RH circuit to battery is shorted.	Check sound signal driver headrest speaker RH circuit.
FR-SEAT L-SP OPEN [U1288]	Sound signal passenger headrest speaker LH circuit is open.	Check sound signal passenger headrest speaker LH circuit.
FR-SEAT L-SP SHORT [U1289]	Sound signal passenger headrest speaker LH circuit is shorted between passenger headrest speaker LH signal (+) and passenger headrest speaker LH signal (-).	Check sound signal passenger headrest speaker LH circuit.
FR-SEAT L-SP GND-SHORT [U128A]	Sound signal passenger headrest speaker LH circuit to ground is shorted.	Check sound signal passenger headrest speaker LH circuit.
FR-SEAT L-SP VB-SHORT [U128B]	Sound signal passenger headrest speaker LH circuit to battery is shorted.	Check sound signal passenger headrest speaker LH circuit.
FR-SEAT R-SP OPEN [U128C]	Sound signal passenger headrest speaker RH circuit is open.	Check sound signal passenger headrest speaker RH circuit.
FR-SEAT R-SP SHORT [U128D]	Sound signal passenger headrest speaker RH circuit is shorted between passenger headrest speaker RH signal (+) and passenger headrest speaker RH signal (-).	Check sound signal passenger headrest speaker RH circuit.
FR-SEAT R-SP GND-SHORT [U128E]	Sound signal passenger headrest speaker RH circuit to ground is shorted.	Check sound signal passenger headrest speaker RH circuit.
FR-SEAT R-SP VB-SHORT [U128F]	Sound signal passenger headrest speaker RH circuit to battery is shorted.	Check sound signal passenger headrest speaker RH circuit.
CORRECT MICRO OPEN [U1290]	Mic. signal (for AudioPilot®) circuit is open.	Check Mic. signal (for Audiopilot®) circuit.
CORRECT MICRO SHORT [U1291]	Mic. signal (for AudioPilot®) circuit is shorted between MIC.signal (for AudioPilot®) (+) and MIC.signal (for AudioPilot®) (-).	Check Mic. signal (for Audiopilot®) circuit.
CORRECT MICRO GND-SHORT [U1292]	Mic. signal (for AudioPilot®) circuit to ground is shorted.	Check Mic. signal (for Audiopilot®) circuit.
CORRECT MICRO VB-SHORT [U1293]	Mic. signal (for AudioPilot®) circuit to battery is shorted.	Check Mic. signal (for Audiopilot®) circuit.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• INTERNAL COMM [U121F]</li> </ul>	<ul style="list-style-type: none"> <li>• AV control unit power supply and ground circuits.</li> <li>• AV control unit malfunction is detected.</li> </ul>	AV control unit power supply and ground circuits.

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Error item	Description	Possible malfunction factor/Action to take
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• SWITCH CONN [U1240]</li> </ul>	<ul style="list-style-type: none"> <li>• Multifunction switch power supply and ground circuits malfunction is detected.</li> <li>• Malfunction is detected in AV communication circuits between AV control unit and multifunction switch.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and multifunction switch.</li> </ul>	<ul style="list-style-type: none"> <li>• Multifunction switch power supply and ground circuits.</li> <li>• AV communication circuit between AV control unit and multifunction switch.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• AMP CONN [U124E]</li> </ul>	BOSE amp. power supply and ground circuits are malfunctioning.	BOSE amp. power supply and ground circuits.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> </ul>	<ul style="list-style-type: none"> <li>• Camera control unit power supply and ground circuits malfunction is detected.</li> <li>• Malfunction is detected in AV communication circuit between BOSE amp. and camera control unit.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and camera control unit.</li> </ul>	<ul style="list-style-type: none"> <li>• Camera control unit power supply and ground circuits.</li> <li>• AV communication circuits between BOSE amp. and camera control unit.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• IPOD CONN [U1254]</li> </ul>	<ul style="list-style-type: none"> <li>• iPod adapter power supply and ground circuits malfunction is detected</li> <li>• Malfunction is detected in AV communication circuits between multifunction switch and iPod adapter.</li> <li>• Malfunction is detected in AV communication signal between AV control unit and iPod adapter.</li> </ul>	<ul style="list-style-type: none"> <li>• iPod adapter power supply and ground circuits</li> <li>• AV communication circuits between multifunction switch and iPod adapter.</li> </ul>
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> <li>• AMP CONN [U124E]</li> </ul>	Malfunction is detected in AV communication circuits between iPod adapter and BOSE amp.	AV communication circuits between iPod adapter and BOSE amp.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> <li>• IPOD CONN [U1254]</li> <li>• AMP CONN [U124E]</li> </ul>	Malfunction is detected in AV communication circuits between multifunction switch and BOSE amp.	AV communication circuits between multifunction switch and BOSE amp.
<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• SWITCH CONN [U1240]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> <li>• IPOD CONN [U1254]</li> <li>• AMP CONN [U124E]</li> </ul>	Malfunction is detected in AV communication circuits between AV control unit and multifunction switch.	AV communication circuits between AV control unit and multifunction switch.

## DATA MONITOR

### ALL SIGNALS

- Displays the status of the following vehicle signals inputted into the AV control unit.
- For each signal, actual signal can be compared with the condition recognized on the system.

Display Item	Display	Vehicle status	Remarks
VHCL SPD SIG	On	Vehicle speed >0 km/h (0 MPH)	Changes in indication may be delayed. This is normal.
	Off	Vehicle speed =0 km/h (0 MPH)	
PKB SIG	On	Parking brake is applied.	
	Off	Parking brake is released.	

# DIAGNOSIS SYSTEM (AV CONTROL UNIT)

< SYSTEM DESCRIPTION >

[BOSE AUDIO WITH NAVIGATION]

Display Item	Display	Vehicle status	Remarks
ILLUM SIG	On	Block the light beam from the auto light optical sensor when the light SW is ON.	—
	Off	Expose the auto light optical sensor to light when the light SW is OFF or ON.	
IGN SIG	On	Ignition switch ON	
	Off	Ignition switch in ACC position	
REV SIG	On	Selector lever in R position	Changes in indication may be delayed. This is normal.
	Off	Selector lever in any position other than R	

## SELECTION FROM MENU

Allows the technician to select which vehicle signals should be displayed and displays the status of the selected vehicle signals.

Item to be selected	Description
VHCL SPD SIG	The same as when "ALL SIGNALS" is selected.
PKB SIG	
ILLUM SIG	
IGN SIG	
REV SIG	

# U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## DTC/CIRCUIT DIAGNOSIS

### U1000 CAN COMM CIRCUIT

#### Description

INFOID:0000000004371743

CAN (Controller Area Network) is a serial communication line for real-time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independently). In CAN communication, control units are connected with 2 communication lines (CAN-H, CAN-L) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Signal Chart. Refer to [LAN-25, "CAN System Specification Chart"](#).

#### DTC Logic

INFOID:0000000004371744

#### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	Diagnostic item is detected when ...	Probable malfunction location
U1000	CAN COMM CIRCUIT	AV control unit is not transmitting or receiving CAN communication signal for 2 seconds or more.	CAN communication system.

#### Diagnosis Procedure

INFOID:0000000004371745

#### 1. PERFORM SELF-DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check "Self Diagnostic Result" of "MULTI AV".

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to "LAN system". Refer to [LAN-16, "Trouble Diagnosis Flow Chart"](#).  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

AV

# U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1010 CONTROL UNIT (CAN)

### Description

INFOID:000000004371746

Initial diagnosis of AV control unit.

### DTC Logic

INFOID:000000004371747

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	Diagnostic item is detected when ...	Probable malfunction location
U1010	CONTROL UNIT (CAN)	CAN initial diagnosis malfunction is detected.	AV control unit.

### Diagnosis Procedure

INFOID:000000004371748

#### 1. REPLACE AV CONTROL UNIT

When DTC U1010 is detected, replace AV control unit.

>> INSPECTION END

# U1310 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1310 AV CONTROL UNIT

### Description

INFOID:000000004371749

Replace the AV control unit if this DTC is displayed. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371750

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1310	CONTROL UNIT (AV) [U1310]	An initial diagnosis error is detected in AV communication circuit.	Replace AV control unit.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

AV

# U1200 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1200 AV CONTROL UNIT

### Description

INFOID:000000004931074

Replace the AV control unit if this DTC is displayed. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371752

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1200	Cont Unit FLASH-ROM [U1200]	An internal malfunction is detected in AV control unit (FLASH-ROM).	Replace AV control unit.



# U1201 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1201 AV CONTROL UNIT

### Description

INFOID:000000004931075

Replace the AV control unit if this DTC is displayed. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371754

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1201	GYRO NO CONN [U1201]	Internal malfunction of AV control unit (gyrocompass disconnection) is detected.	Replace AV control unit.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

AV

O  
P

# U1216 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1216 AV CONTROL UNIT

### Description

INFOID:000000004931092

Replace the AV control unit if this DTC is displayed. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371756

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1216	CAN CONT [U1216]	Internal malfunction of AV control unit (CAN controller) is detected.	Replace AV control unit.

# U1217 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1217 AV CONTROL UNIT

### Description

INFOID:000000004931093

Replace the AV control unit if this DTC is displayed. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>It inputs the illumination signals that are required for the display dimming control.</li><li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371758

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1217	BLUETOOTH MODULE CONN [U1217]	Internal malfunction of AV control unit (Bluetooth module connection malfunction) is detected.	Replace AV control unit.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

AV

# U1218 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1218 AV CONTROL UNIT

### Description

INFOID:000000004931078

Replace the AV control unit if this DTC is displayed. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371760

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1218	HDD-CONN [U1218]	Internal malfunction of AV control unit (HDD connection malfunction) is detected.	Replace AV control unit.

# U1219 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1219 AV CONTROL UNIT

### Description

INFOID:000000004931079

Replace the AV control unit if this DTC is displayed. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>It inputs the illumination signals that are required for the display dimming control.</li><li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371762

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1219	HDD-READ [U1219]	Internal malfunction of AV control unit (HDD read malfunction) is detected.	Replace AV control unit.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

AV

# U1220 AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1220 AV CONTROL UNIT

### Description

INFOID:000000004931080

Replace the AV control unit if this DTC is displayed. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371764

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1220	XM SERIAL COMM [U1220]	Internal malfunction of AV control unit (satellite radio tuner communication error) is detected.	Replace AV control unit.

# U121A AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U121A AV CONTROL UNIT

### Description

INFOID:000000004931081

Replace the AV control unit if this DTC is displayed. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371766

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121A	HDD-WRITE [U121A]	Internal malfunction of AV control unit (HDD write malfunction) is detected.	Replace AV control unit.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

AV

O  
P

# U121B AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U121B AV CONTROL UNIT

### Description

INFOID:000000004931082

Replace the AV control unit if this DTC is displayed. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371768

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121B	HDD-COMM [U121B]	Internal malfunction of AV control unit (HDD communication error) is detected.	Replace AV control unit.



# U121C AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U121C AV CONTROL UNIT

### Description

INFOID:000000004931083

Replace the AV control unit if this DTC is displayed. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>It inputs the illumination signals that are required for the display dimming control.</li><li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371770

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121C	HDD-ACCESS [U121C]	Internal malfunction of AV control unit (HDD access error) is detected.	Replace AV control unit.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P



# U121D AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U121D AV CONTROL UNIT

### Description

INFOID:000000004931084

Replace the AV control unit if this DTC is displayed. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371772

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121D	DSP CONN [U121D]	Internal malfunction of AV control unit (DSP connection error) is detected.	Replace AV control unit.

# U121E AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U121E AV CONTROL UNIT

### Description

INFOID:000000004931085

Replace the AV control unit if this DTC is displayed. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371774

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121E	DSP COMM [U121E]	Internal malfunction of AV control unit (DSP communication error) is detected.	Replace AV control unit.

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# U121F AV CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U121F AV CONTROL UNIT

### Description

INFOID:000000004931086

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"><li>• Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li><li>• It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li><li>• The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li><li>• It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li><li>• It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li><li>• It inputs the illumination signals that are required for the display dimming control.</li><li>• It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li></ul>

### DTC Logic

INFOID:000000004371776

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U121F	INTERNAL COMM [U121F]	Internal malfunction of AV control unit (internal communication error) is detected.	AV control unit power supply and ground circuit.

### Diagnosis Procedure

INFOID:000000004371777

#### 1. CHECK AV CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check AV control unit power supply and ground circuit. Refer to [AV-565, "AV CONTROL UNIT : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace malfunctioning parts.

U1204 GPS

Description

INFOID:000000005184782

An intermittent error caused by strong radio interference may be detected unless any symptom (GPS reception error, etc.) occurs. Replace the AV control unit if the malfunction occurs constantly. Refer to [AV-738](#), "[Exploded View](#)".

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li> <li>It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> </ul>

DTC Logic

INFOID:000000004371779

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1204	GPS COMM [U1204]	Internal malfunction of AV control unit (GPS malfunction) is detected.	Replace AV control unit.

Diagnosis Procedure

INFOID:000000004371780

1. PERFORM THE SELF-DIAGNOSIS

- Delete the self-diagnosis results. Turn ignition switch OFF.
- Turn ignition switch ON. Perform the self-diagnosis again.
- Check that the DTC is detected again.

Is any DTC detected?

- YES >> Replace AV control unit.
- NO >> The intermittent malfunction caused by strong radio interference can be detected.

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**U1205 GPS**

**Description**

INFOID:000000005185277

An intermittent error caused by strong radio interference may be detected unless any symptom (GPS reception error, etc.) occurs. Replace the AV control unit if the malfunction occurs constantly. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li> <li>It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> </ul>

**DTC Logic**

INFOID:000000004371782

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1205	GPS ROM [U1205]	Internal malfunction of AV control unit (GPS malfunction) is detected.	Replace AV control unit.

**Diagnosis Procedure**

INFOID:000000004371783

**1. PERFORM THE SELF-DIAGNOSIS**

- Delete the self-diagnosis results. Turn ignition switch OFF.
- Turn ignition switch ON. Perform the self-diagnosis again.
- Check that the DTC is detected again.

Is any DTC detected?

- YES >> Replace AV control unit.
- NO >> The intermittent malfunction caused by strong radio interference can be detected.

U1206 GPS

Description

INFOID:000000005185275

An intermittent error caused by strong radio interference may be detected unless any symptom (GPS reception error, etc.) occurs. Replace the AV control unit if the malfunction occurs constantly. Refer to [AV-738](#), "[Exploded View](#)".

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li> <li>It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> </ul>

DTC Logic

INFOID:000000004371785

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1206	GPS RAM [U1206]	Internal malfunction of AV control unit (GPS malfunction) is detected.	Replace AV control unit.

Diagnosis Procedure

INFOID:000000004371786

1. PERFORM THE SELF-DIAGNOSIS

- Delete the self-diagnosis results. Turn ignition switch OFF.
- Turn ignition switch ON. Perform the self-diagnosis again.
- Check that the DTC is detected again.

Is any DTC detected?

YES >> Replace AV control unit.

NO >> The intermittent malfunction caused by strong radio interference can be detected.

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**U1207 GPS**

**Description**

INFOID:000000005185259

An intermittent error caused by strong radio interference may be detected unless any symptom (GPS reception error, etc.) occurs. Replace the AV control unit if the malfunction occurs constantly. Refer to [AV-738, "Exploded View"](#).

Part name	Description
AV CONTROL UNIT	<ul style="list-style-type: none"> <li>Integrates HDD (hard disk drive) allowing map data and music data to be stored.</li> <li>It is the master unit of the MULTI AV system, and it is connected to each control unit by communication. It operates each system according to communication signals from the AV control unit.</li> <li>The AV control unit includes the audio, hands-free phone, voice control, navigation, satellite radio and vehicle information functions.</li> <li>It is connected to ECM and unified meter and A/C amp. via CAN communication to obtain necessary information for the vehicle information function.</li> <li>It is connected to BCM via CAN communication transmitting/receiving for the vehicle settings function.</li> <li>It inputs the illumination signals that are required for the display dimming control.</li> <li>It inputs the signals for driving status recognition (vehicle speed, reverse and parking brake).</li> </ul>

**DTC Logic**

INFOID:000000004371788

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1207	GPS RTC [U1207]	Internal malfunction of AV control unit (GPS malfunction) is detected.	Replace AV control unit.

**Diagnosis Procedure**

INFOID:000000004371789

**1. PERFORM THE SELF-DIAGNOSIS**

- Delete the self-diagnosis results. Turn ignition switch OFF.
- Turn ignition switch ON. Perform the self-diagnosis again.
- Check that the DTC is detected again.

Is any DTC detected?

- YES >> Replace AV control unit.  
 NO >> The intermittent malfunction caused by strong radio interference can be detected.



# U1231 BOSE AMP.

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1231 BOSE AMP.

### Description

INFOID:000000005136661

Replace the BOSE amp. if this DTC is displayed. Refer to [AV-746. "Exploded View"](#).

Part name	Description
BOSE AMP.	Inputs power (amp. ON) and sound signal from AV control unit and, and outputs sound signal to each speaker.

### DTC Logic

INFOID:000000005136662

DTC	Display contents of CONSULT-III	DTC Detection Condition	Action to take
U1231	AMP TEMP [U1231]	Internal malfunction of BOSE amp. is detected.	Replace BOSE amp.

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# U1243 DISPLAY UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1243 DISPLAY UNIT

### Description

INFOID:000000004371790

Part name	Description
DISPLAY UNIT	<ul style="list-style-type: none"> <li>• Display image is controlled by the serial communication from AV control unit.</li> <li>• RGB image signal is input from AV control unit (RGB, RGB area and RGB synchronizing). Auxiliary image signal is input from the auxiliary input jack. Camera image signal is input from the camera control unit.</li> <li>• Synchronize signal (HP, VP) is output to AV control unit.</li> <li>• Touch panel function can be operated for each system by touching a display directly.</li> </ul>

### DTC Logic

INFOID:000000004371791

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1243	FRONT DISP CONN [U1243]	<ul style="list-style-type: none"> <li>• Display unit power supply and ground circuit malfunction is detected</li> <li>• Malfunction is detected in communication circuit between AV control unit and display unit</li> <li>• Malfunction is detected in communication signal between AV control unit and display unit</li> </ul>	<ul style="list-style-type: none"> <li>• Display unit power supply and ground circuit.</li> <li>• Communication circuit between AV control unit and display unit.</li> </ul>

### Diagnosis Procedure

INFOID:000000005129416

#### 1. CHECK DISPLAY UNIT POWER SUPPLY AND GROUND CIRCUIT

Check display unit power supply and ground circuit. Refer to [AV-565, "DISPLAY UNIT : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

#### 2. CHECK CONTINUITY COMMUNICATION CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminals	Connector	Terminals	
M75	11	M88	70	Existed
	22		71	

4. Check continuity between display unit harness connector and ground.

Display unit		Ground	Continuity
Connector	Terminals		
M75	11		Not existed
	22		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

#### 3. CHECK COMMUNICATION SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.

# U1243 DISPLAY UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

3. Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M75	11	Ground	When adjusting display brightness.	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace AV control unit.

## 4. CHECK COMMUNICATION SIGNAL

Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M75	22	Ground	When adjusting display brightness.	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace display unit.

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AV

# U1244 GPS ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1244 GPS ANTENNA

### Description

INFOID:000000004371793

Part name	Description
GPS ANTENNA	GPS signal is received and transmitted to AV control unit.

### DTC Logic

INFOID:000000005129417

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1244	GPS ANETNNA CONN [U1244]	GPS antenna connection malfunction is detected.	GPS antenna disconnection.

### Diagnosis Procedure

INFOID:000000005129417

#### 1. GPS ANTENNA CHECK

Visually check GPS antenna and antenna feeder.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

#### 2. CHECK AV CONTROL UNIT VOLTAGE

1. Disconnect GPS antenna connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit and ground.

(+)	(-)	Voltage (Approx.)
AV control unit		
Terminal		
110	Ground	5.0 V

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace AV control unit.

# U1250 CAMERA CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1250 CAMERA CONTROL UNIT

### Description

INFOID:000000004371796

Part name	Description
CAMERA CONTROL UNIT	<ul style="list-style-type: none"> <li>• Camera image signal is input from rear view camera, and camera image is indicated on the display.</li> <li>• Power (camera ON signal) is transmitted to rear view camera.</li> <li>• Controlled by AV communication transmitted from AV control unit.</li> <li>• AV control unit recognizes the presence of camera system with camera connection recognition signal.</li> </ul>

### DTC Logic

INFOID:000000004371797

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1250	CAMERA CONT. CONN [U1250]	Malfunction is detected in camera connection recognition signal circuit.	Camera connection recognition signal circuit.

### Diagnosis Procedure

INFOID:000000005129418

#### 1. CHECK CAMERA CONNECTION RECOGNITION SIGNAL CIRCUIT

1. Disconnect AV control unit connector and camera control unit connector.
2. Check continuity between AV control unit harness connector and camera control unit harness connector.

AV control unit		Camera control unit		Continuity
Connector	Terminal	Connector	Terminal	
M87	40	B241	14	Existed

Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK AV CONTROL UNIT VOLTAGE

1. Connect AV control unit connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit harness connector and ground.

(+) AV control unit		(-)	Voltage (Approx.)
Connector	Terminal		
M87	40	Ground	5.0 V

Is the inspection result normal?

- YES >> Replace camera control unit.  
 NO >> Replace AV control unit.

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AV

# U1258 SATELLITE RADIO ANTENNA

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1258 SATELLITE RADIO ANTENNA

### Description

INFOID:000000004371799

Part name	Description
SATELLITE RADIO ANTENNA	Satellite radio signal is received and transmitted to AV control unit.

### DTC Logic

INFOID:000000004371800

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1258	XM ANTENNA CONN [U1258]	Satellite radio antenna connection malfunction is detected.	Satellite radio antenna disconnection.

### Diagnosis Procedure

INFOID:000000005129419

#### 1. SATELLITE RADIO ANTENNA CHECK

Visually check satellite radio antenna and antenna feeder.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair malfunctioning parts.

#### 2. CHECK AV CONTROL UNIT VOLTAGE

1. Disconnect satellite radio antenna connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit and ground.

(+)	(-)	Voltage (Approx.)
AV control unit		
Terminal		
108	Ground	5.0 V

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace AV control unit.

# U1260, U1261, U1262, U1263 CENTER SPEAKER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1260, U1261, U1262, U1263 CENTER SPEAKER

### Description

INFOID:000000004929278

Part name	Description
CENTER SPEAKER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs sound (mid range).</li></ul>

### DTC Logic

INFOID:000000004929279

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1260	CENTER SP OPEN [U1260]	Sound signal center speaker circuit is open.	Check sound signal center speaker circuit.
U1261	CENTER SP SHORT [U1261]	Sound signal center speaker circuit is shorted between center speaker signal (+) and center speaker signal (-).	Check sound signal center speaker circuit.
U1262	CENTER SP GND-SHORT [U1262]	Sound signal center speaker circuit to ground is shorted.	Check sound signal center speaker circuit.
U1263	CENTER SP VB-SHORT [U1263]	Sound signal center speaker circuit to battery is shorted.	Check sound signal center speaker circuit.

### Diagnosis Procedure

INFOID:000000004929280

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal center speaker circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

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AV

**U1264, U1265, U1266, U1267 FRONT RIGHT TWEETER/RIGHT SQUAWKER**  
**[BOSE AUDIO WITH NAVIGATION]**  
 < DTC/CIRCUIT DIAGNOSIS >

**U1264, U1265, U1266, U1267 FRONT RIGHT TWEETER/RIGHT SQUAWKER**

**Description**

INFOID:000000004929281

Part name	Description
TWEETER	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs sound (high range).</li> </ul>
SQUAWKER	<ul style="list-style-type: none"> <li>• Outputs sound signal from BOSE amp.</li> <li>• Outputs sound (high and mid range).</li> </ul>

**DTC Logic**

INFOID:000000004929282

**DTC DETECTION LOGIC**

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1264	FR-DOOR SP OPEN [U1264]	Sound signal front speaker RH circuit is open.	Check sound signal front speaker RH circuit.
U1265	FR-DOOR SP SHORT [U1265]	Sound signal front speaker RH circuit is shorted between front speaker RH signal (+) and front speaker RH signal (-).	Check sound signal front speaker RH circuit.
U1266	FR-DOOR SP GND-SHORT [U1266]	Sound signal front speaker RH circuit to ground is shorted.	Check sound signal front speaker RH circuit.
U1267	FR-DOOR SP VB-SHORT [U1267]	Sound signal front speaker RH circuit to battery is shorted.	Check sound signal front speaker RH circuit.

**Diagnosis Procedure**

INFOID:000000005136674

**1. PERFORM THE SELF-DIAGNOSIS**

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

**Is any DTC detected?**

- YES >> Repair sound signal front speaker RH circuit harness or connector.  
 NO >> Refer to GI section. Refer to [GI-36. "Intermittent Incident"](#).



# U1268, U1269, U126A, U126B FRONT RIGHT DOOR WOOFER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1268, U1269, U126A, U126B FRONT RIGHT DOOR WOOFER

### Description

INFOID:000000004929284

Part name	Description
DOOR WOOFER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs low-pitched sound.</li></ul>

### DTC Logic

INFOID:000000004929285

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1268	RR-SP/FR-WOOFER OPEN [U1268]	Sound signal door woofer RH circuit is open.	Check sound signal door woofer RH circuit.
U1269	RR-SP/FR-WOOFER SHORT [U1269]	Sound signal door woofer RH circuit is shorted between door woofer RH signal (+) and door woofer RH signal (-).	Check sound signal door woofer RH circuit.
U126A	RR-SP/FR-WOOFER GND- SHORT [U126A]	Sound signal door woofer RH circuit to ground is shorted.	Check sound signal door woofer RH circuit.
U126B	RR-SP/FR-WOOFER VB-SHORT [U126B]	Sound signal door woofer RH circuit to battery is shorted.	Check sound signal door woofer RH circuit.

### Diagnosis Procedure

INFOID:000000005136677

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal door woofer RH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

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# U126C, U126D, U126E, U126F REAR RIGHT WOOFER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U126C, U126D, U126E, U126F REAR RIGHT WOOFER

### Description

INFOID:000000004929287

Part name	Description
REAR WOOFER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs low-pitched sound.</li></ul>

### DTC Logic

INFOID:000000004929288

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U126C	RR-SURROUND SP OPEN [U126C]	Sound signal rear woofer RH circuit is open.	Check sound signal rear woofer RH circuit.
U126D	RR-SURROUND SP SHORT [U126D]	Sound signal rear woofer RH circuit is shorted between rear woofer RH signal (+) and rear woofer RH signal (-).	Check sound signal rear woofer RH circuit.
U126E	RR-SURROUND SP GND- SHORT [U126E]	Sound signal rear woofer RH circuit to ground is shorted.	Check sound signal rear woofer RH circuit.
U126F	RR-SURROUND SP VB-SHORT [U126F]	Sound signal rear woofer RH circuit to battery is shorted.	Check sound signal rear woofer RH circuit.

### Diagnosis Procedure

INFOID:000000005136678

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal rear woofer RH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

# U1274, U1275, U1276, U1277 REAR LEFT WOOFER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1274, U1275, U1276, U1277 REAR LEFT WOOFER

### Description

INFOID:000000004929290

Part name	Description
REAR WOOFER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs low-pitched sound.</li></ul>

### DTC Logic

INFOID:000000004929291

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1274	RL-SURROUND SP OPEN [U1274]	Sound signal rear woofer LH circuit is open.	Check sound signal rear woofer LH circuit.
U1275	RL-SURROUND SP SHORT [U1275]	Sound signal rear woofer LH circuit is shorted between rear woofer LH signal (+) and rear woofer LH signal (-).	Check sound signal rear woofer LH circuit.
U1276	RL-SURROUND SP GND- SHORT [U1276]	Sound signal rear woofer LH circuit to ground is shorted.	Check sound signal rear woofer LH circuit.
U1277	RL-SURROUND SP VB-SHORT [U1277]	Sound signal rear woofer LH circuit to battery is shorted.	Check sound signal rear woofer LH circuit.

### Diagnosis Procedure

INFOID:000000005136679

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal rear woofer LH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

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AV

# U1278, U1279, U127A, U127B FRONT LEFT DOOR WOOFER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1278, U1279, U127A, U127B FRONT LEFT DOOR WOOFER

### Description

INFOID:000000004929293

Part name	Description
DOOR WOOFER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs low-pitched sound.</li></ul>

### DTC Logic

INFOID:000000004929294

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1278	RL- SP/FL-WOOFER OPEN [U1278]	Sound signal door woofer LH circuit is open.	Check sound signal door woofer LH circuit.
U1279	RL- SP/FL-WOOFER SHORT [U1279]	Sound signal door woofer LH circuit is shorted between door woofer LH signal (+) and door woofer LH signal (-).	Check sound signal door woofer LH circuit.
U127A	RL- SP/FL-WOOFER GND- SHORT [U127A]	Sound signal door woofer LH circuit to ground is shorted.	Check sound signal door woofer LH circuit.
U127B	RL- SP/FL-WOOFER VB-SHORT [U127B]	Sound signal door woofer LH circuit to battery is shorted.	Check sound signal door woofer LH circuit.

### Diagnosis Procedure

INFOID:000000005136680

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal door woofer LH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

# U127C, U127D, U127E, U127F FRONT LEFT TWEETER/LEFT SQUAWKER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U127C, U127D, U127E, U127F FRONT LEFT TWEETER/LEFT SQUAWKER

### Description

INFOID:000000004929296

Part name	Description
TWEETER	<ul style="list-style-type: none"><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high range).</li></ul>
SQUAWKER	<ul style="list-style-type: none"><li>Outputs sound signal from BOSE amp.</li><li>Outputs sound (high and mid range).</li></ul>

### DTC Logic

INFOID:000000004929297

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U127C	FL- DOOR SP OPEN [U127C]	Sound signal front speaker LH circuit is open.	Check sound signal front speaker LH circuit.
U127D	FL- DOOR SP SHORT [U127D]	Sound signal front speaker LH circuit is shorted between front speaker LH signal (+) and front speaker LH signal (-).	Check sound signal front speaker LH circuit.
U127E	FL- DOOR SP GND-SHORT [U127E]	Sound signal front speaker LH circuit to ground is shorted.	Check sound signal front speaker LH circuit.
U127F	FL- DOOR SP VB-SHORT [U127F]	Sound signal front speaker LH circuit to battery is shorted.	Check sound signal front speaker LH circuit.

### Diagnosis Procedure

INFOID:000000005136681

#### 1. PERFORM THE SELF-DIAGNOSIS

- Delete the self-diagnosis results. Turn ignition switch OFF.
- Turn ignition switch ON. perform the self-diagnosis again.
- Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal front speaker LH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

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AV

# U1280, U1281, U1282, U1283 DRIVER HEADREST LEFT SPEAKER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1280, U1281, U1282, U1283 DRIVER HEADREST LEFT SPEAKER

### Description

INFOID:000000005136663

Part name	Description
HEADREST SPEAKER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs mid range sound.</li></ul>

### DTC Logic

INFOID:000000005136664

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1280	FL-SEAT L-SP OPEN [U1280]	Sound signal driver headrest speaker LH circuit is open.	Check sound signal driver headrest speaker LH circuit.
U1281	FL-SEAT L-SP SHORT [U1281]	Sound signal driver headrest speaker LH circuit is shorted between driver headrest speaker LH signal (+) and driver headrest speaker LH signal (-).	Check sound signal driver headrest speaker LH circuit.
U1282	FL-SEAT L-SP GND-SHORT [U1282]	Sound signal driver headrest speaker LH circuit to ground is shorted.	Check sound signal driver headrest speaker LH circuit.
U1283	FL-SEAT L-SP VB-SHORT [U1283]	Sound signal driver headrest speaker LH circuit to battery is shorted.	Check sound signal driver headrest speaker LH circuit.

### Diagnosis Procedure

INFOID:000000005136682

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal driver headrest speaker LH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

# U1284, U1285, U1286, U1287 DRIVER HEADREST RIGHT SPEAKER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1284, U1285, U1286, U1287 DRIVER HEADREST RIGHT SPEAKER

### Description

INFOID:000000005136689

Part name	Description
HEADREST SPEAKER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs mid range sound.</li></ul>

### DTC Logic

INFOID:000000005136686

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1284	FL-SEAT R-SP OPEN [U1284]	Sound signal driver headrest speaker RH circuit is open.	Check sound signal driver headrest speaker RH circuit.
U1285	FL-SEAT R-SP SHORT [U1285]	Sound signal driver headrest speaker RH circuit is shorted between driver headrest speaker RH signal (+) and driver headrest speaker RH signal (-).	Check sound signal driver headrest speaker RH circuit.
U1286	FL-SEAT R-SP GND-SHORT [U1286]	Sound signal driver headrest speaker RH circuit to ground is shorted.	Check sound signal driver headrest speaker RH circuit.
U1287	FL-SEAT R-SP VB-SHORT [U1287]	Sound signal driver headrest speaker RH circuit to battery is shorted.	Check sound signal driver headrest speaker RH circuit.

### Diagnosis Procedure

INFOID:000000005136687

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal center speaker circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

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# U1288, U1289, U128A, U128B PASSENGER HEADREST LEFT SPEAKER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1288, U1289, U128A, U128B PASSENGER HEADREST LEFT SPEAKER

### Description

INFOID:000000005136691

Part name	Description
HEADREST SPEAKER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs mid range sound.</li></ul>

### DTC Logic

INFOID:000000005136692

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1288	FR-SEAT L-SP OPEN [U1288]	Sound signal passenger headrest speaker LH circuit is open.	Check sound signal passenger headrest speaker LH circuit.
U1289	FR-SEAT L-SP SHORT [U1289]	Sound signal passenger headrest speaker LH circuit is shorted between passenger headrest speaker LH signal (+) and passenger headrest speaker LH signal (-).	Check sound signal passenger headrest speaker LH circuit.
U128A	FR-SEAT L-SP GND-SHORT [U128A]	Sound signal passenger headrest speaker LH circuit to ground is shorted.	Check sound signal passenger headrest speaker LH circuit.
U128B	FR-SEAT L-SP VB-SHORT [U128B]	Sound signal passenger headrest speaker LH circuit to battery is shorted.	Check sound signal passenger headrest speaker LH circuit.

### Diagnosis Procedure

INFOID:000000005136693

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal passenger headrest speaker LH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).



# U128C, U128D, U128E, U128F PASSENGER HEADREST RIGHT SPEAKER

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U128C, U128D, U128E, U128F PASSENGER HEADREST RIGHT SPEAKER

### Description

INFOID:000000005136705

Part name	Description
HEADREST SPEAKER	<ul style="list-style-type: none"><li>• Outputs sound signal from BOSE amp.</li><li>• Outputs mid range sound.</li></ul>

### DTC Logic

INFOID:000000005136706

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U128C	FR-SEAT R-SP OPEN [U128C]	Sound signal passenger headrest speaker RH circuit is open.	Check sound signal passenger headrest speaker RH circuit.
U128D	FR-SEAT R-SP SHORT [U128D]	Sound signal passenger headrest speaker RH circuit is shorted between passenger headrest speaker RH signal (+) and passenger headrest speaker RH signal (-).	Check sound signal passenger headrest speaker RH circuit.
U128E	FR-SEAT R-SP GND-SHORT [U128E]	Sound signal passenger headrest speaker RH circuit to ground is shorted.	Check sound signal passenger headrest speaker RH circuit.
U128F	FR-SEAT R-SP VB-SHORT [U128F]	Sound signal passenger headrest speaker RH circuit to battery is shorted.	Check sound signal passenger headrest speaker RH circuit.

### Diagnosis Procedure

INFOID:000000005136707

#### 1. PERFORM THE SELF-DIAGNOSIS

1. Delete the self-diagnosis results. Turn ignition switch OFF.
2. Turn ignition switch ON. perform the self-diagnosis again.
3. Check that the DTC is detected again.

#### Is any DTC detected?

- YES >> Repair sound signal driver headrest speaker LH circuit harness or connector.  
NO >> Refer to GI section. Refer to [GI-36, "Intermittent Incident"](#).

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# U1290, U1291, U1292, U1293 AUDIOPILOT™ MICROPHONE

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1290, U1291, U1292, U1293 AUDIOPILOT™ MICROPHONE

### Description

INFOID:000000005136666

Part name	Description
MICROPHONE (for AudioPilot®)	<ul style="list-style-type: none"><li>Used for AudioPilot®</li><li>Mic.signal is transmitted to BOSE amp.</li></ul>

### DTC Logic

INFOID:000000005184851

### DTC DETECTION LOGIC

DTC	Display contents of CONSULT-III	DTC Detection Condition	Possible causes
U1290	CORRECT MICRO OPEN [U1290]	Mic. signal (for AudioPilot®) circuit is open.	Check Mic. signal (for Audiopilot®) circuit.
U1291	CORRECT MICRO SHORT [U1291]	Mic. signal (for AudioPilot®) circuit is shorted between MIC.signal (for AudioPilot®) (+) and MIC.signal (for Audiopilot®) (-).	Check Mic. signal (for Audiopilot®) circuit.
U1292	CORRECT MICRO GND-SHORT [U1292]	Mic. signal (for AudioPilot®) circuit to ground is shorted.	Check Mic. signal (for Audiopilot®) circuit.
U1293	CENTER SP VB-SHORT [U1293]	Mic. signal (for AudioPilot®) circuit to battery is shorted.	Check Mic. signal (for Audiopilot®) circuit.

### Diagnosis Procedure

INFOID:000000005136715

#### 1. CHECK CONTINUITY BETWEEN BOSE AMP. AND MICROPHONE FOR AUDIOPILOT® CIRCUIT

- Turn ignition switch OFF.
- Disconnect BOSE amp. connector and microphone for AudioPilot® connector.
- Check continuity between BOSE amp. harness connector and microphone for AudioPilot® harness connector.

BOSE amp.		Microphone for AudioPilot®		Continuity
Connector	Terminals	Connector	Terminals	
B41	31	B617	81	Existed
	11		82	

- Check continuity between BOSE amp. harness connector and ground.

BOSE amp.		Ground	Continuity
Connector	Terminals		
B41	31		Not existed
	11		

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

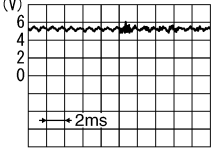
#### 2. CHECK MICROPHONE SIGNAL

- Connect BOSE amp. connector and microphone for AudioPilot® connector.
- Check signal between BOSE amp. harness connector.

# U1290, U1291, U1292, U1293 AUDIPILOT™ MICROPHONE

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

(+)		(-)		Condition	Reference value
BOSE amp.		BOSE amp.			
Connector	Terminal	Connector	Terminal		
B41	31	B41	11	When inputting noise.	 <p style="text-align: center;">(reference value)</p> <p style="text-align: right; font-size: small;">PKIA2104E</p>

Is the inspection result normal?

- YES >> Replace BOSE amp.
- NO >> Replace microphone for AudioPilot®.

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AV

# U1300 AV COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## U1300 AV COMM CIRCUIT

### Description

INFOID:000000004371802

U1300 is indicated when malfunction occurs in communication signal of multi AV system. Indicated simultaneously, without fail, with the malfunction of control units connected to AV control unit with communication line. Determine the possible malfunction cause from the table below.

### SELF-DIAGNOSIS RESULTS DISPLAY ITEM

DTC	Display contents of CONSULT-III	Description	Possible malfunction factor/Action to take
U1300 U121F	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>INTERNAL COMM [U121F]</li> </ul>	<ul style="list-style-type: none"> <li>AV control unit power supply and ground circuits.</li> <li>AV control unit malfunction is detected.</li> </ul>	AV control unit power supply and ground circuits.
U1300 U1240	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>SWITCH CONN [U1240]</li> </ul>	<ul style="list-style-type: none"> <li>Multifunction switch power supply and ground circuits malfunction is detected.</li> <li>Malfunction is detected in AV communication circuits between AV control unit and multifunction switch.</li> <li>Malfunction is detected in AV communication signal between AV control unit and multifunction switch.</li> </ul>	<ul style="list-style-type: none"> <li>Multifunction switch power supply and ground circuits.</li> <li>AV communication circuit between AV control unit and multifunction switch.</li> </ul>
U1300 U124E	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>AMP CONN [U124E]</li> </ul>	BOSE amp. power supply and ground circuits are malfunctioning.	BOSE amp. power supply and ground circuits.
U1300 U1252	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>REAR CAMERA LAN CONN [U1252]</li> </ul>	<ul style="list-style-type: none"> <li>Camera control unit power supply and ground circuits malfunction is detected.</li> <li>Malfunction is detected in AV communication circuit between BOSE amp. and camera control unit.</li> <li>Malfunction is detected in AV communication signal between AV control unit and camera control unit.</li> </ul>	<ul style="list-style-type: none"> <li>Camera control unit power supply and ground circuits.</li> <li>AV communication circuits between BOSE amp. and camera control unit.</li> </ul>
U1300 U1254	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>IPOD CONN [U1254]</li> </ul>	<ul style="list-style-type: none"> <li>iPod adapter power supply and ground circuits malfunction is detected</li> <li>Malfunction is detected in AV communication circuits between multifunction switch and iPod adapter.</li> <li>Malfunction is detected in AV communication signal between AV control unit and iPod adapter.</li> </ul>	<ul style="list-style-type: none"> <li>iPod adapter power supply and ground circuits</li> <li>AV communication circuits between multifunction switch and iPod adapter.</li> </ul>
U1300 U1252 U124E	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>AMP CONN [U124E]</li> </ul>	Malfunction is detected in AV communication circuits between iPod adapter and BOSE amp.	AV communication circuits between iPod adapter and BOSE amp.
U1300 U1252 U1254 U124E	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>IPOD CONN [U1254]</li> <li>AMP CONN [U124E]</li> </ul>	Malfunction is detected in AV communication circuits between multifunction switch and BOSE amp.	AV communication circuits between multifunction switch and BOSE amp.
U1300 U1240 U1252 U1254 U124E	<ul style="list-style-type: none"> <li>AV COMM CIRCUIT [U1300]</li> <li>SWITCH CONN [U1240]</li> <li>REAR CAMERA LAN CONN [U1252]</li> <li>IPOD CONN [U1254]</li> <li>AMP CONN [U124E]</li> </ul>	Malfunction is detected in AV communication circuits between AV control unit and multifunction switch.	AV communication circuits between AV control unit and multifunction switch.

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## POWER SUPPLY AND GROUND CIRCUIT

### AV CONTROL UNIT

#### AV CONTROL UNIT : Diagnosis Procedure

INFOID:000000005129420

#### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19
Ignition switch ON or START	3

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

#### 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between AV control unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	M80	19	OFF	Battery voltage
	M87	22		
		24		
ACC power supply	M80	7	ACC	Battery voltage
	M87	25		
Ignition signal	M87	35	ON	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between AV control unit and fuse.

#### 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect AV control unit connectors.
3. Check continuity between AV control unit harness connectors and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M87	21	OFF	Existed
		23		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

### DISPLAY UNIT

#### DISPLAY UNIT : Diagnosis Procedure

INFOID:000000005129421

#### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19

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# POWER SUPPLY AND GROUND CIRCUIT

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

## 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between display unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	M75	2	OFF	Battery voltage
ACC power supply	M75	3	ACC	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between Display unit and fuse.

## 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector.
3. Check continuity between display unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M75	1	OFF	Existed
		13		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## MULTIFUNCTION SWITCH

### MULTIFUNCTION SWITCH : Diagnosis Procedure

INFOID:000000005129422

## 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

## 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between multifunction switch harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
ACC power supply	M72	3	ACC	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between multifunction switch and fuse.

## 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect multifunction switch connector.
3. Check continuity between multifunction switch harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	M72	1	OFF	Existed

# POWER SUPPLY AND GROUND CIRCUIT

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## CAMERA CONTROL UNIT

### CAMERA CONTROL UNIT : Diagnosis Procedure

INFOID:000000005129423

#### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

#### 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between camera control unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	B241	32	OFF	Battery voltage
ACC power supply	B241	30	ACC	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between camera control unit and fuse.

#### 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector.
3. Check continuity between camera control unit harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B241	31	OFF	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## BOSE AMP.

### BOSE AMP. : Diagnosis Procedure

INFOID:000000005129424

#### 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	5, 8
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

#### 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between BOSE amp. harness connector and ground.

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AV

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	B42	50	OFF	Battery voltage
		51		
ACC power supply	B41	16	ACC	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between BOSE amp. and fuse.

## 3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BOSE amp. connector.
3. Check continuity between BOSE amp. harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Continuity
Ground	B42	47	OFF	Existed
		52		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

## iPod ADAPTER

### iPod ADAPTER : Diagnosis Procedure

INFOID:000000005129426

## 1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	34
Ignition switch ACC or ON	19

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

## 2.CHECK POWER SUPPLY CIRCUIT

Check voltage between iPod adapter harness connector and ground.

Signal name	Connector No.	Terminal No.	Ignition switch position	Value (Approx.)
Battery power supply	M111	5	OFF	Battery voltage
ACC power supply	M111	3	ACC	Battery voltage

Is the inspection result normal?

YES >> INSPECTION END

NO >> Check harness between iPod adapter and fuse.



# RGB (R: RED) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## RGB (R: RED) SIGNAL CIRCUIT

### Description

INFOID:000000004371810

Transmit the image displayed with AV control unit with RGB signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129429

#### 1. CHECK CONTINUITY RGB (R: RED) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	17	M88	61	Existed

4. Check continuity between display unit harness connector and ground.

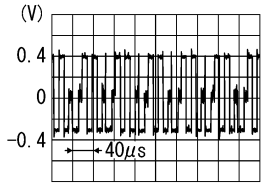
Display unit		Ground	Continuity
Connector	Terminal		
M75	17		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK RGB (R: RED) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M75	17	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2238J</p>

Is the inspection result normal?

- YES >> Replace display unit.  
 NO >> Replace AV control unit.

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# RGB (G: GREEN) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## RGB (G: GREEN) SIGNAL CIRCUIT

### Description

INFOID:000000004371812

Transmit the image displayed with AV control unit with RGB signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129430

#### 1. CHECK CONTINUITY RGB (G: GREEN) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	6	M88	62	Existed

4. Check continuity between display unit harness connector and ground.

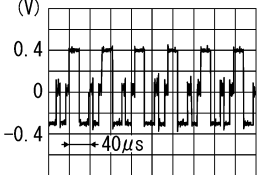
Display unit		Ground	Continuity
Connector	Terminal		
M75	6		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK RGB (G: GREEN) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M75	6	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>40µs</p> <p>SKIB2236J</p>

Is the inspection result normal?

- YES >> Replace display unit.  
 NO >> Replace AV control unit.

# RGB (B: BLUE) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## RGB (B: BLUE) SIGNAL CIRCUIT

### Description

INFOID:000000004371814

Transmit the image displayed with AV control unit with RGB signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129431

#### 1. CHECK CONTINUITY RGB (B: BLUE) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	18	M88	63	Existed

4. Check continuity between display unit harness connector and ground.

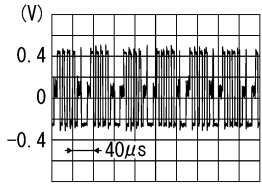
Display unit		Ground	Continuity
Connector	Terminal		
M75	18		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK RGB (B: BLUE) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value
Display unit				
Connector	Terminal			
M75	18	Ground	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 <p>(V)</p> <p>0.4</p> <p>0</p> <p>-0.4</p> <p>← 40µs</p> <p>SKIB2237J</p>

Is the inspection result normal?

- YES >> Replace display unit.  
 NO >> Replace AV control unit.

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# RGB SYNCHRONIZING SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## RGB SYNCHRONIZING SIGNAL CIRCUIT

### Description

INFOID:000000004371816

Transmit the RGB synchronizing signal to the display unit so as to synchronize the RGB image displayed with AV control unit.

### Diagnosis Procedure

INFOID:000000005129432

#### 1. CHECK CONTINUITY RGB SYNCHRONIZING SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	19	M88	65	Existed

4. Check continuity between display unit harness connector and ground.

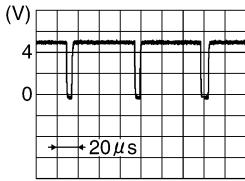
Display unit		Ground	Continuity
Connector	Terminal		
M75	19		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK RGB SYNCHRONIZING SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Reference value
Connector	Terminal		
M75	19	Ground	 <p style="text-align: center;">SKIB3603E</p>

Is the inspection result normal?

- YES >> Replace display unit.  
 NO >> Replace AV control unit.

# RGB AREA (YS) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## RGB AREA (YS) SIGNAL CIRCUIT

### Description

INFOID:000000004371818

Transmits the display area of RGB image displayed by AV control unit with RGB area (YS) signal to display unit.

### Diagnosis Procedure

INFOID:000000005129433

#### 1. CHECK CONTINUITY RGB AREA (YS) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	9	M88	67	Existed

4. Check continuity between display unit harness connector and ground.

Display unit		Ground	Continuity
Connector	Terminal		
M75	9		Not existed

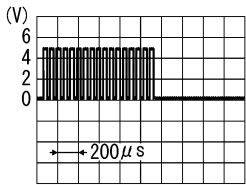
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK RGB AREA (YS) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Condition	Reference value (Approx.)
Display unit				
Connector	Terminal			
M75	9	Ground	At RGB image is displayed.	5.0 V
			At rear view camera image is displayed.	

Is the inspection result normal?

YES >> Replace display unit.

NO >> Replace AV control unit.

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# HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

### Description

INFOID:000000004371820

In composite image (AUX image), transmit the vertical synchronizing (VP) signal and horizontal synchronizing (HP) signal from display unit to AV control unit so as to synchronize the RGB images displayed with AV control unit such as the image quality adjusting menu, etc.

### Diagnosis Procedure

INFOID:000000005129434

#### 1. CHECK CONTINUITY HORIZONTAL SYNCHRONIZING (HP) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	8	M88	68	Existed

4. Check continuity between display unit harness connector and ground.

Display unit		Ground	Continuity
Connector	Terminal		
M75	8		Not existed

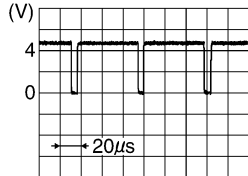
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK HORIZONTAL SYNCHRONIZING (HP) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+)		(-)	Reference value
Display unit			
Connector	Terminal		
M75	8	Ground	 SKIB3601E

Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace display unit.

# VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

### Description

INFOID:000000004371822

In composite image (AUX image), transmit the vertical synchronizing (VP) signal and horizontal synchronizing (HP) signal from display unit to AV control unit so as to synchronize the RGB images displayed with AV control unit such as the image quality adjusting menu, etc.

### Diagnosis Procedure

INFOID:000000005129435

#### 1. CHECK CONTINUITY VERTICAL SYNCHRONIZING (VP) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect display unit connector and AV control unit connector.
3. Check continuity between display unit harness connector and AV control unit harness connector.

Display unit		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M75	20	M88	69	Existed

4. Check continuity between display unit harness connector and ground.

Display unit		Ground	Continuity
Connector	Terminal		
M75	20		Not existed

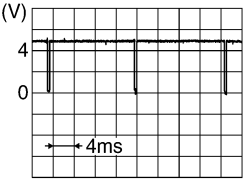
Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK VERTICAL SYNCHRONIZING (VP) SIGNAL

1. Connect display unit connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check signal between display unit harness connector and ground.

(+) Display unit		(-)	Reference value
Connector	Terminal		
M75	20	Ground	

Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace display unit.

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# AUX IMAGE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## AUX IMAGE SIGNAL CIRCUIT

### Description

INFOID:000000004371824

Transmits the image signal of external device from auxiliary input jacks to display unit.

### Diagnosis Procedure

INFOID:000000005129436

#### 1. CHECK CONTINUITY AUX IMAGE SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect auxiliary input jacks connector and display unit connector.
3. Check continuity between auxiliary input jacks harness connector and display unit harness connector.

Auxiliary input jacks		Display unit		Continuity
Connector	Terminal	Connector	Terminal	
M154*1	7	M75	15	Existed
M362*2				

- \*1: A/T models
- \*2: M/T models

4. Check continuity between auxiliary input jacks harness connector and ground.

Auxiliary input jacks		Ground	Continuity
Connector	Terminal		
M154*1	7	Ground	Not existed
M362*2			

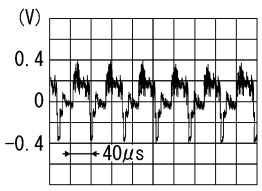
- \*1: A/T models
- \*2: M/T models

#### Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK AUX IMAGE SIGNAL

1. Connect auxiliary input jacks connector and display unit connector.
2. Turn ignition switch ON.
3. Check signal between auxiliary input jacks harness connector and ground.

(+)		(-)	Condition	Reference value
Connector	Terminal			
M154*1	7	Ground	At AUX image is displayed.	 <p>SKIB2251J</p>
M362*2				

- \*1: A/T models
- \*2: M/T models

#### Is the inspection result normal?

- YES >> Replace display unit.  
 NO >> Check that there is no malfunction in the external device.



# DISK EJECT SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## DISK EJECT SIGNAL CIRCUIT

### Description

INFOID:000000004371828

The eject signal is output to AV control unit when the eject switch of multifunction switch is pressed.

### Diagnosis Procedure

INFOID:000000005129437

#### 1. CHECK CONTINUITY CD EJECT SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect multifunction switch connector and AV control unit connector.
3. Check continuity between multifunction switch harness connector and AV control unit harness connector.

Multifunction switch		AV control unit		Continuity
Connector	Terminal	Connector	Terminal	
M72	14	M89	85	Existed

4. Check continuity between multifunction switch harness connector and ground.

Multifunction switch		Ground	Continuity
Connector	Terminal		
M72	14		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK AV CONTROL UNIT VOLTAGE

1. Connect multifunction switch connector and AV control unit connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit harness connector and ground.

(+)		(-)	Condition	Voltage (Approx.)
AV control unit				
Connector	Terminal			
M89	85	Ground	Pressing the eject switch	0 V
			Except for above	5.0 V

Is the inspection result normal?

- YES >> Replace preset switch.  
NO >> Replace AV control unit.

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# MICROPHONE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## MICROPHONE SIGNAL CIRCUIT

### Description

INFOID:000000004371830

Supply power from AV control unit to microphone. The microphone transmits the sound/voice to the AV control unit.

### Diagnosis Procedure

INFOID:000000005129438

#### 1.CHECK CONTINUITY BETWEEN AV CONTROL UNIT AND MICROPHONE CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect AV control unit connector and microphone connector.
3. Check continuity between AV control unit harness connector and microphone harness connector.

AV control unit		Microphone		Continuity
Connector	Terminals	Connector	Terminals	
M87	26	R7	4	Existed
	27		2	
	28		1	

4. Check continuity between AV control unit harness connector and ground.

AV control unit		Ground	Continuity
Connector	Terminals		
M87	26		Not existed
	28		

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2.CHECK VOLTAGE MICROPHONE VCC

1. Connect AV control unit connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit harness connector.

(+)		(-)		Voltage (Approx.)
AV control unit		AV control unit		
Connector	Terminal	Connector	Terminal	
M87	26	M87	27	5.0 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace AV control unit.

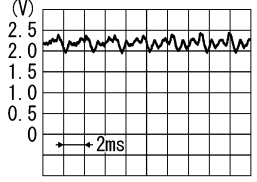
#### 3.CHECK MICROPHONE SIGNAL

1. Connect microphone connector.
2. Check signal between AV control unit harness connector.

# MICROPHONE SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

(+)		(-)		Condition	Reference value
AV control unit		AV control unit			
Connector	Terminal	Connector	Terminal		
M87	28	M87	27	Give a voice.	 <p style="text-align: right; font-size: small;">PKIB5037J</p>

Is the inspection result normal?

YES >> Replace AV control unit.

NO >> Replace microphone.

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# CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)

### Description

INFOID:000000004371832

- Camera control unit outputs camera power supply to rear view camera and inputs rear view camera image signal from rear view camera when the reverse signal is input.
- The camera control unit that inputs the camera image signal transmits the camera image signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129641

#### 1. CHECK CONTINUITY CAMERA POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and rear view camera connector.
3. Check continuity between camera control unit harness connector and rear view camera harness connector.

Camera control unit		Rear view camera		Continuity
Connector	Terminal	Connector	Terminal	
B241	8	B311	1	Existed

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminal		
B241	8		Not existed

Is inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK VOLTAGE CAMERA POWER SUPPLY

1. Connect camera control unit connector and rear view camera connector.
2. Turn ignition switch ON.
3. Shift position is "R".
4. Check voltage between camera control unit harness connector and ground.

(+)		(-)	Condition	Voltage (Approx.)
Camera control unit				
Connector	Terminal			
B241	8	Ground	Shift position is "R".	6.0 V

Is inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

#### 3. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and rear view camera connector.
3. Check continuity between camera control unit harness connector and rear view camera harness connector.

Camera control unit		Rear view camera		Continuity
Connector	Terminal	Connector	Terminal	
B241	6	B311	3	Existed

# CAMERA IMAGE SIGNAL CIRCUIT (REAR VIEW CAMERA TO CAMERA CONTROL UNIT)

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminal		
B241	6		Not existed

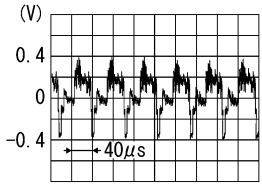
Is inspection result normal?

YES >> GO TO 4.

NO >> Repair harness or connector.

## 4. CHECK CAMERA IMAGE SIGNAL

1. Connect camera control unit connector and rear view camera connector.
2. Turn ignition switch ON.
3. Shift position is "R".
4. Check signal between camera control unit harness connector and ground.

(+)		(-)	Condition	Reference value
Camera control unit				
Connector	Terminal			
B241	6	Ground	At rear view camera image is displayed.	 <p style="text-align: right; font-size: small;">SKIB2251J</p>

Is inspection result normal?

YES >> Replace camera control unit.

NO >> Replace rear view camera.

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# CAMERA IMAGE SIGNAL CIRCUIT (CAMERA CONTROL UNIT TO DISPLAY UNIT)

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## CAMERA IMAGE SIGNAL CIRCUIT (CAMERA CONTROL UNIT TO DISPLAY UNIT)

### Description

INFOID:000000004371836

- Camera control unit outputs camera power supply to rear view camera and inputs rear view camera image signal from rear view camera when the reverse signal is input.
- The camera control unit that inputs the camera image signal transmits the camera image signal to the display unit.

### Diagnosis Procedure

INFOID:000000005129644

#### 1. CHECK CONTINUITY CAMERA IMAGE SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and display unit connector.
3. Check continuity between camera control unit harness connector and display unit harness connector.

Camera control unit		Display unit		Continuity
Connector	Terminal	Connector	Terminal	
B241	12	M75	12	Existed

4. Check continuity between camera control unit harness connector and ground.

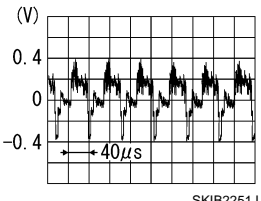
Camera control unit		Ground	Continuity
Connector	Terminal		
B241	12		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
 NO >> Repair harness or connector.

#### 2. CHECK CAMERA IMAGE SIGNAL

1. Connect camera control unit connector and display unit connector.
2. Turn ignition switch ON.
3. Check signal between camera control unit harness connector and ground.

(+)		(-)	Condition	Reference value
Camera control unit				
Connector	Terminal			
B241	12	Ground	At rear view camera image is displayed.	 <p style="text-align: right; font-size: small;">SKIB2251J</p>

Is the inspection result normal?

- YES >> Replace display unit.  
 NO >> Replace camera control unit.

# STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT

### Description

INFOID:000000004371838

- Steering angle sensor signal 1, 2 detects the turning direction and quantity of the steering and transmits it to the camera control unit.
- Steering angle sensor signal 3 detects the neutral position of the steering and transmits it to the camera control unit.
- Camera control unit performs the correction of neutral position with sensor signal 1, 2, 3 and vehicle speed signal.

### Diagnosis Procedure

INFOID:000000005129439

#### 1. CHECK CONTINUITY STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and steering angle sensor connector.
3. Check continuity between camera control unit harness connector and steering angle sensor harness connector.

Camera control unit		Steering angle sensor		Continuity
Connector	Terminals	Connector	Terminals	
B241	23	M37	3	Existed
	24		4	

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminals		
B241	23		Not existed
	24		

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK SENSOR SIGNAL 1, 2

1. Connect camera control unit connector.
2. Turn ignition switch ON.
3. Check voltage between camera control unit harness connector and ground.

(+) Camera control unit		(-)	Voltage (Approx.)
Connector	Terminals		
B241	23	Ground	5.0 V
	24		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

#### 3. CHECK SENSOR SIGNAL 1, 2

1. Connect steering angle sensor connector.
2. Check signal between camera control unit harness connector and ground.

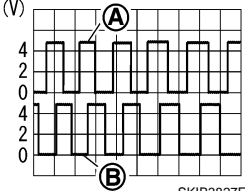
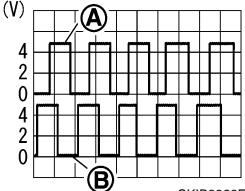
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# STEERING ANGLE SENSOR SIGNAL 1, 2 CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

(+)		(-)	Condition	Reference value
Camera control unit				
Connector	Terminals			
B241	23, 24	Ground	Turn the steering to the right	 <p>SKIB3827E</p> <p>A: Sensor signal 1 B: Sensor signal 2</p>
			Turn the steering to the left	 <p>SKIB3828E</p> <p>A: Sensor signal 1 B: Sensor signal 2</p>

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering angle sensor.



# STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT

### Description

INFOID:000000004371840

- Steering angle sensor signal 1, 2 detects the turning direction and quantity of the steering and transmits it to the camera control unit.
- Steering angle sensor signal 3 detects the neutral position of the steering and transmits it to the camera control unit.
- Camera control unit performs the correction of neutral position with sensor signal 1, 2, 3 and vehicle speed signal.

### Diagnosis Procedure

INFOID:000000005129440

#### 1. CHECK CONTINUITY STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect camera control unit connector and steering angle sensor connector.
3. Check continuity between camera control unit harness connector and steering angle sensor harness connector.

Camera control unit		Steering angle sensor		Continuity
Connector	Terminals	Connector	Terminals	
B241	25	M37	5	Existed

4. Check continuity between camera control unit harness connector and ground.

Camera control unit		Ground	Continuity
Connector	Terminals		
B241	25		Not existed

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair harness or connector.

#### 2. CHECK SENSOR SIGNAL 3

1. Connect camera control unit connector.
2. Turn ignition switch ON.
3. Check voltage between camera control unit harness connector and ground.

(+)		(-)	Voltage (Approx.)
Connector	Terminals		
B241	25	Ground	5.0 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace camera control unit.

#### 3. CHECK SENSOR SIGNAL 3

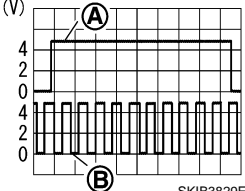
1. Connect steering angle sensor connector.
2. Check signal between camera control unit harness connector and ground.

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# STEERING ANGLE SENSOR SIGNAL 3 CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

(+)		(-)	Condition	Reference value
Camera control unit				
Connector	Terminals			
B241	25	Ground	Turn the steering around the neutral position	 <p>(V)</p> <p>4 2 0 4 2 0</p> <p>SKIB3829E</p> <p>A: Sensor signal 3 B: Sensor signal 1</p>

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace steering angle sensor.

# STEERING SWITCH SIGNAL A CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## STEERING SWITCH SIGNAL A CIRCUIT

### Description

INFOID:000000004371842

Transmits the steering switch signal to AV control unit.

### Diagnosis Procedure

INFOID:000000005129441

#### 1. CHECK STEERING SWITCH SIGNAL A CIRCUIT

1. Disconnect AV control unit connector and spiral cable connector.
2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M80	6	M36	24	Existed

3. Check continuity between AV control unit harness connector and ground.

AV control unit		Ground	Continuity
Connector	Terminal		
M80	6		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK SPIRAL CABLE

Check spiral cable.

Is the inspection result normal?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3. CHECK AV CONTROL UNIT VOLTAGE

1. Connect AV control unit connector and spiral cable connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit harness connector.

(+)		(-)		Voltage (Approx.)
AV control unit		AV control unit		
Connector	Terminal	Connector	Terminal	
M80	6	M80	15	5.0 V

Is the inspection result normal?

- YES >> GO TO 4.  
NO >> Replace AV control unit.

#### 4. CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-587, "Component Inspection"](#).

Is the inspection result normal?

- YES >> INSPECTION END  
NO >> Replace steering switch.

### Component Inspection

INFOID:000000004371844

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.

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# STEERING SWITCH SIGNAL A CIRCUIT

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

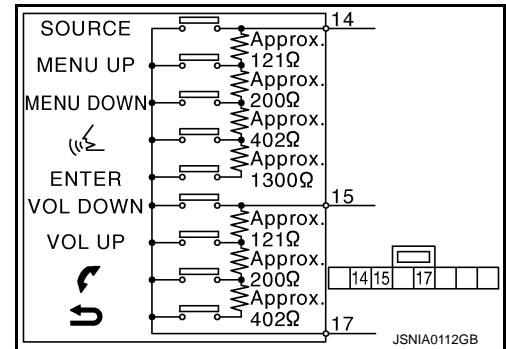
Standard

Between terminals 14 and 17

ENTER switch ON	: 2003 – 2043 Ω
⏪ switch ON	: 716 – 730 Ω
MENU DOWN switch ON	: 318 – 324 Ω
MENU UP switch ON	: 120 – 122 Ω
SOURCE switch ON	: 0 Ω

Between terminals 15 and 17

⏩ switch ON	: 716 – 730 Ω
⏪ switch ON	: 318 – 324 Ω
VOL UP switch ON	: 120 – 122 Ω
VOL DOWN switch ON	: 0 Ω



# STEERING SWITCH SIGNAL B CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## STEERING SWITCH SIGNAL B CIRCUIT

### Description

INFOID:000000004371845

Transmits the steering switch signal to AV control unit.

### Diagnosis Procedure

INFOID:000000005129442

#### 1. CHECK STEERING SWITCH SIGNAL B CIRCUIT

1. Disconnect AV control unit connector and spiral cable connector.
2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M80	16	M36	31	Existed

3. Check continuity between AV control unit harness connector and ground.

AV control unit		Ground	Continuity
Connector	Terminal		
M80	16		Not existed

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2. CHECK SPIRAL CABLE

Check spiral cable.

Is the inspection result normal?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3. CHECK AV CONTROL UNIT VOLTAGE

1. Connect AV control unit connector and spiral cable connector.
2. Turn ignition switch ON.
3. Check voltage between AV control unit harness connector.

(+)		(-)		Voltage (Approx.)
AV control unit		AV control unit		
Connector	Terminal	Connector	Terminal	
M80	16	M80	15	5.0 V

Is the inspection result normal?

- YES >> GO TO 4.  
NO >> Replace AV control unit.

#### 4. CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-589, "Component Inspection"](#).

Is the inspection result normal?

- YES >> INSPECTION END  
NO >> Replace steering switch.

### Component Inspection

INFOID:000000004371847

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.

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# STEERING SWITCH SIGNAL B CIRCUIT

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

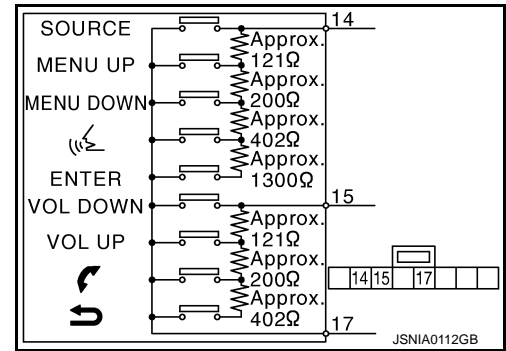
Standard

Between terminals 14 and 17

ENTER switch ON	: 2003 – 2043 Ω
⏪ switch ON	: 716 – 730 Ω
MENU DOWN switch ON	: 318 – 324 Ω
MENU UP switch ON	: 120 – 122 Ω
SOURCE switch ON	: 0 Ω

Between terminals 15 and 17

⏩ switch ON	: 716 – 730 Ω
⏪ switch ON	: 318 – 324 Ω
VOL UP switch ON	: 120 – 122 Ω
VOL DOWN switch ON	: 0 Ω



# STEERING SWITCH SIGNAL GND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## STEERING SWITCH SIGNAL GND CIRCUIT

### Description

INFOID:000000004371848

Transmits the steering switch signal to AV control unit.

### Diagnosis Procedure

INFOID:000000005129443

#### 1.CHECK STEERING SWITCH SIGNAL GND CIRCUIT

1. Disconnect AV control unit connector and spiral cable connector.
2. Check continuity between AV control unit harness connector and spiral cable harness connector.

AV control unit		Spiral cable		Continuity
Connector	Terminal	Connector	Terminal	
M80	15	M36	33	Existed

3. Connect AV control unit connector.

Is the inspection result normal?

- YES >> GO TO 2.  
NO >> Repair harness or connector.

#### 2.CHECK SPIRAL CABLE

Check spiral cable.

Is the inspection result normal?

- YES >> GO TO 3.  
NO >> Replace spiral cable.

#### 3.CHECK GROUND CIRCUIT

1. Connect AV control unit connector.
2. Check continuity between AV control unit harness connector and ground.

AV control unit		Ground	Continuity
Connector	Terminal		
M80	15		Not existed

Is the inspection result normal?

- YES >> GO TO 4.  
NO >> Replace AV control unit.

#### 4.CHECK STEERING SWITCH

1. Turn ignition switch OFF.
2. Check steering switch. Refer to [AV-591, "Component Inspection"](#).

Is the inspection result normal?

- YES >> INSPECTION END  
NO >> Replace steering switch.

### Component Inspection

INFOID:000000004371850

Measure the resistance between the steering switch connector terminals 14 to 17 and 15 to 17.

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# STEERING SWITCH SIGNAL GND CIRCUIT

[BOSE AUDIO WITH NAVIGATION]

< DTC/CIRCUIT DIAGNOSIS >

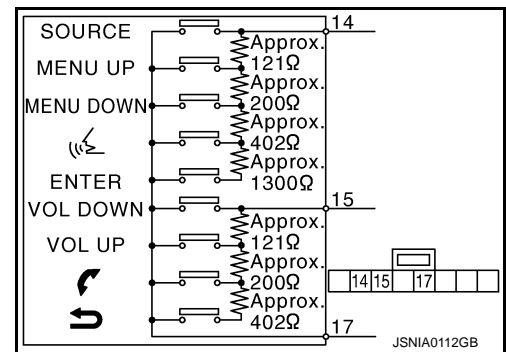
Standard

**Between terminals 14 and 17**

- ENTER switch ON : 2003 – 2043 Ω**
- ↵ switch ON : 716 – 730 Ω**
- MENU DOWN switch ON : 318 – 324 Ω**
- MENU UP switch ON : 120 – 122 Ω**
- SOURCE switch ON : 0 Ω**

**Between terminals 15 and 17**

- ↶ switch ON : 716 – 730 Ω**
- ↷ switch ON : 318 – 324 Ω**
- VOL UP switch ON : 120 – 122 Ω**
- VOL DOWN switch ON : 0 Ω**





# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## ECU DIAGNOSIS INFORMATION

### AV CONTROL UNIT

#### Reference Value

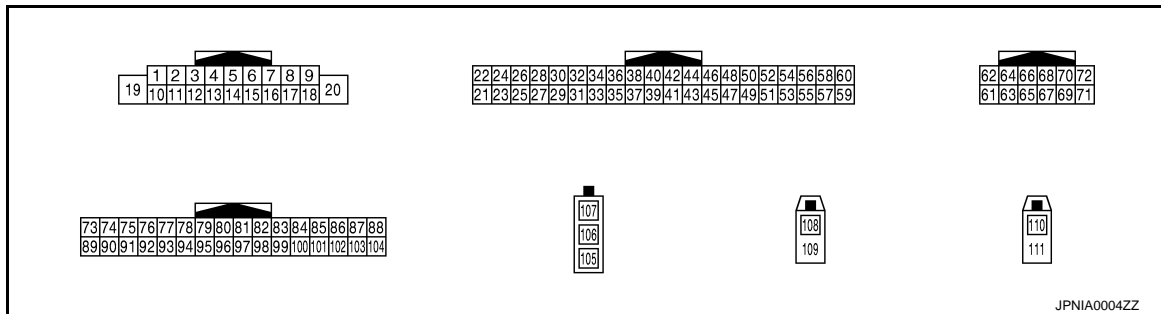
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#### VALUES ON THE DIAGNOSIS TOOL

##### CONSULT-III MONITOR ITEM

Monitor Item	Condition		Value/Status
VHCL SPD SIG	Ignition switch ON	Vehicle speed > 0 km/h (0 MPH)	On
		Vehicle speed = 0 km/h (0 MPH)	Off
PKB SIG	Ignition switch ON	Parking brake is applied.	On
		Parking brake is released.	Off
ILLUM SIG	Ignition switch ON	Light switch ON	On
		Light switch OFF	Off
IGN SIG	Ignition switch ON	—	On
	Ignition switch ACC	—	Off
REV SIG	Ignition switch ON	Selector lever in R position	On
		Selector lever in any position other than R	Off

#### TERMINAL LAYOUT



#### PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/Output			
2 (P)	3 (L)	Sound signal LH	Output	Ignition switch ON	Sound output	 SKIB3609E
4 (BR)	5 (Y)	Voice guidance signal	Output	Ignition switch ON	Sound output	 SKIB3609E

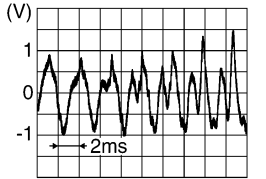
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# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

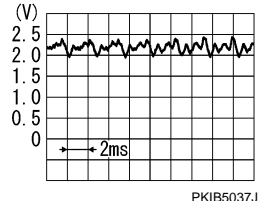
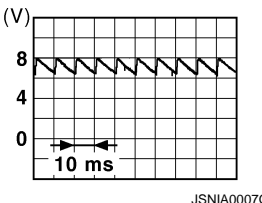
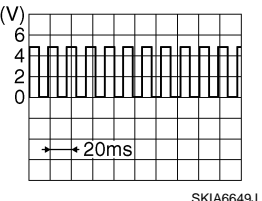
[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition	Reference value (Approx.)	
+	-	Signal name	Input/ Output			
6 (P)	15 (B)	Steering switch signal A	Input	Ignition switch ON	Keep pressing SOURCE switch.	0 V
					Keep pressing $\Delta$ switch.	1.0 V
					Keep pressing $\nabla$ switch.	2.0 V
					Keep pressing $\llcorner$ switch	3.0 V
					Keep pressing ENTER switch.	4.0 V
					Except for above.	5.0 V
7 (GR)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
9 (L)	Ground	Illumination signal	Input	OFF	Lighting switch is OFF.	0 V
					Lighting switch is ON.	12.0 V
10 (B)	—	Shield	—	—	—	—
11 (R)	12 (G)	Sound signal RH	Output	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
16 (L)	15 (B)	Steering switch signal B	Input	Ignition switch ON	Keep pressing VOL DOWN switch.	0 V
					Keep pressing VOL UP switch.	1.0 V
					Keep pressing $\curvearrowright$ switch.	2.0 V
					Keep pressing $\curvearrowleft$ switch.	3.0 V
					Except for above.	5.0 V
19 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
21 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
22 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
23 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
24 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
25 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
26 (G)	27	Microphone VCC	Output	Ignition switch ON	—	5.0 V
28 (R)	27	Microphone signal	Input	Ignition switch ON	Give a voice	
35 (G)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
36 (SB)	Ground	Parking brake signal	Input	Ignition switch ON	Parking brake ON	0 V
					Parking brake OFF	
37 (O)	Ground	Reverse signal	Input	Ignition switch ON	R position	12.0 V
					Other than R position	0 V
38 (GR)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is approx. 40 km/h (25 MPH)	<p><b>NOTE:</b> Maximum voltage may be 12.0 V due to specifications (connected units).</p> 
40 (GR)	Ground	Camera connection recognition signal	Input	Ignition switch ON	Connected to camera control unit connector.	0 V
					Not connected to camera control unit connector.	5.0 V
42 (B)	Ground	Control signal 2	Input	Ignition switch ON	—	0 V
48 (V)	—	AV communication signal (H)	Input/ Output	—	—	—
49 (LG)	—	AV communication signal (L)	Input/ Output	—	—	—
50 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
51 (R)	—	AV communication signal (L)	Input/ Output	—	—	—

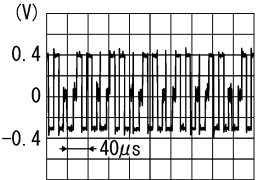
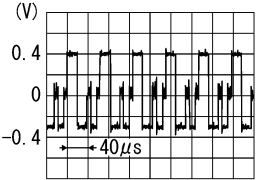
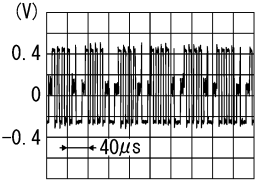
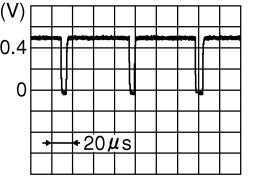
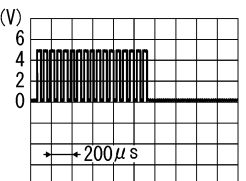
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# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

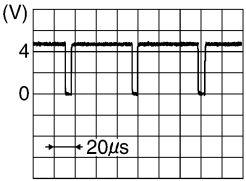
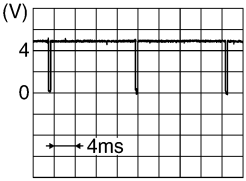
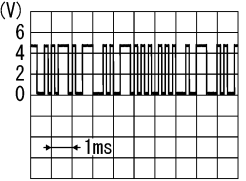
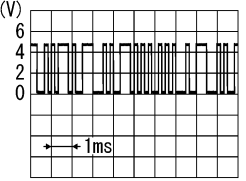
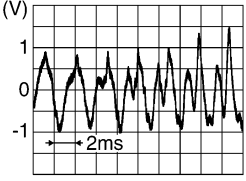
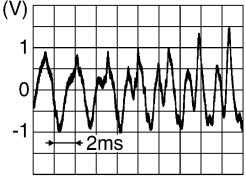
[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
52 (L)	—	CAN-H	Input/ Output	—	—	—
53 (P)	—	CAN-L	Input/ Output	—	—	—
61 (W)	Ground	RGB signal (R: red)	Output	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 SKIB2238J
62 (B)	Ground	RGB signal (G: green)	Output	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 SKIB2236J
63 (R)	Ground	RGB signal (B: blue)	Output	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen.	 SKIB2237J
64	—	Shield	—	—	—	—
65 (G)	Ground	RGB synchronizing signal	Output	Ignition switch ON	—	 JPNIA0461GB
66	—	Shield	—	—	—	—
67 (B)	Ground	RGB area (YS) signal	Output	Ignition switch ON	At RGB image displayed	5.0 V
					At rear view camera image is displayed.	 PKIB4948J

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
68 (R)	Ground	Horizontal synchronizing (HP) signal	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIB3601E</p>
69 (W)	Ground	Vertical synchronizing (VP) signal	Input	Ignition switch ON	—	 <p style="text-align: right; font-size: small;">SKIB3598E</p>
70 (L)	Ground	Communication signal (CONT→DISP)	Output	Ignition switch ON	When adjusting display brightness.	 <p style="text-align: right; font-size: small;">PKIB5039J</p>
71 (P)	Ground	Communication signal (DISP→CONT)	Input	Ignition switch ON	When adjusting display brightness.	 <p style="text-align: right; font-size: small;">PKIB5039J</p>
72	—	Shield	—	—	—	—
79 (R)	95 (W)	iPod sound signal LH	Input	Ignition switch ON	When iPod mode is select- ed.	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
80 (B)	96 (G)	iPod sound signal RH	Input	Ignition switch ON	When iPod mode is select- ed.	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
81	—	Shield	—	—	—	—
85 (SB)	Ground	Disk eject signal	Input	—	Pressing the eject switch	0 V
					Except for above	5.0 V
86	—	Shield	—	—	—	—

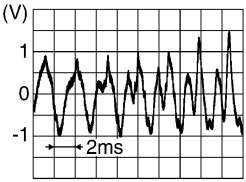
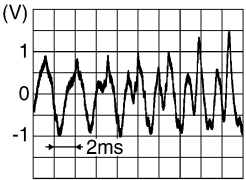
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AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
87 (W)	88 (B)	AUX sound signal LH	Input	Ignition switch ON	When AUX mode is select- ed.	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
102 (BR)	Ground	Switch ground	—	Ignition switch ON	—	0 V
103 (R)	88 (B)	AUX sound signal RH	Input	Ignition switch ON	When AUX mode is select- ed.	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
106	—	AM-FM main	Input	—	—	—
107	Ground	Antenna amp. ON signal	Input	Ignition switch ON	—	12.0 V
108	Ground	Satellite antenna signal	Input	Ignition switch ON	Not connected to satellite antenna connector.	5.0 V
109	—	Shield	—	—	—	—
110	Ground	GPS antenna signal	Input	Ignition switch ON	Not connected GPS anten- na connector.	5.0 V
111	—	Shield	—	—	—	—

## Wiring Diagram - BOSE AUDIO WITH NAVIGATION SYSTEM -

INFOID:000000004371852

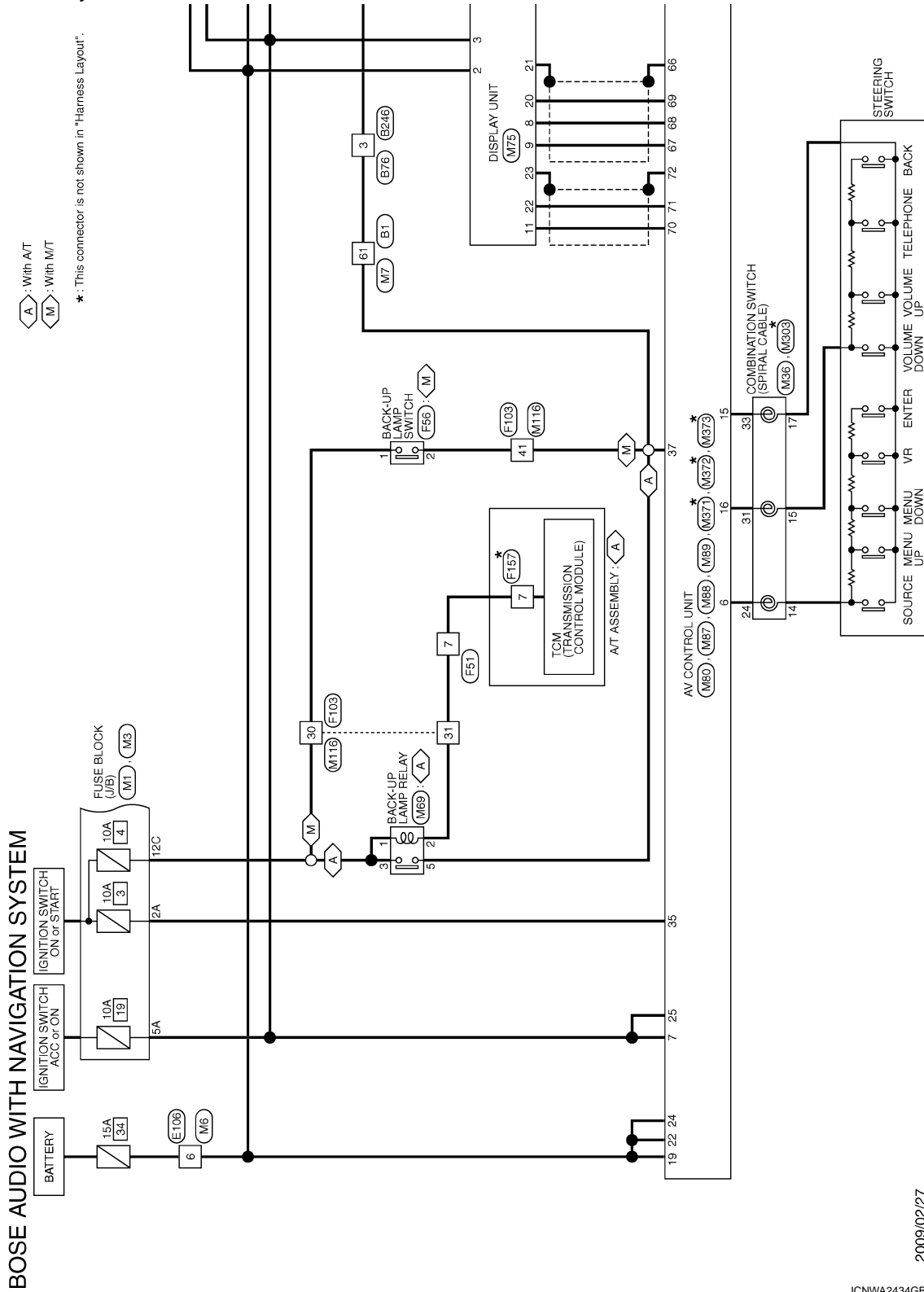
**NOTE:**

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.



2009/02/27

JCNWA2434GB

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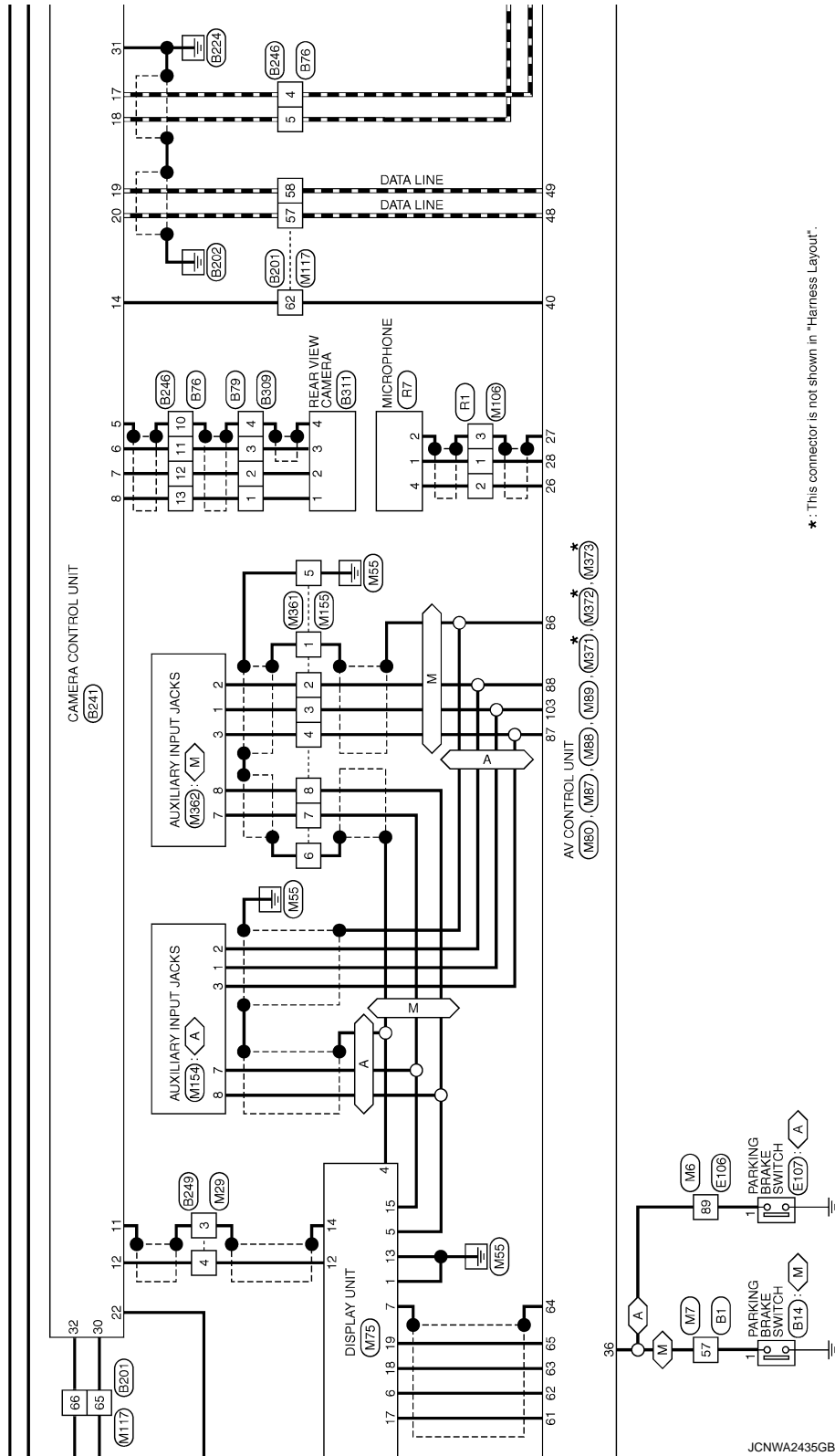
AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

⬠ : With A/T  
⬢ : With M/T

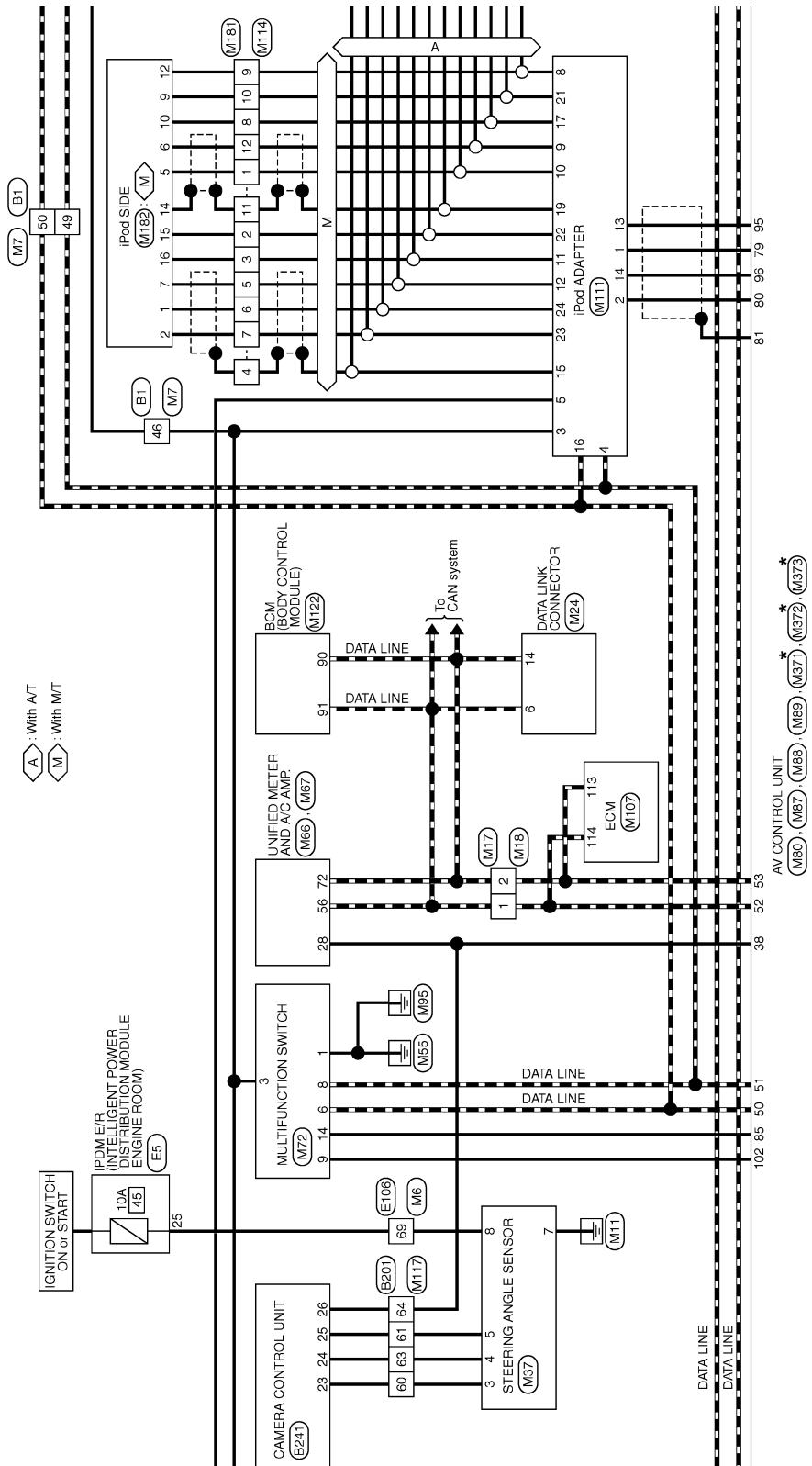




# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



\*: This connector is not shown in "Harness Layout".

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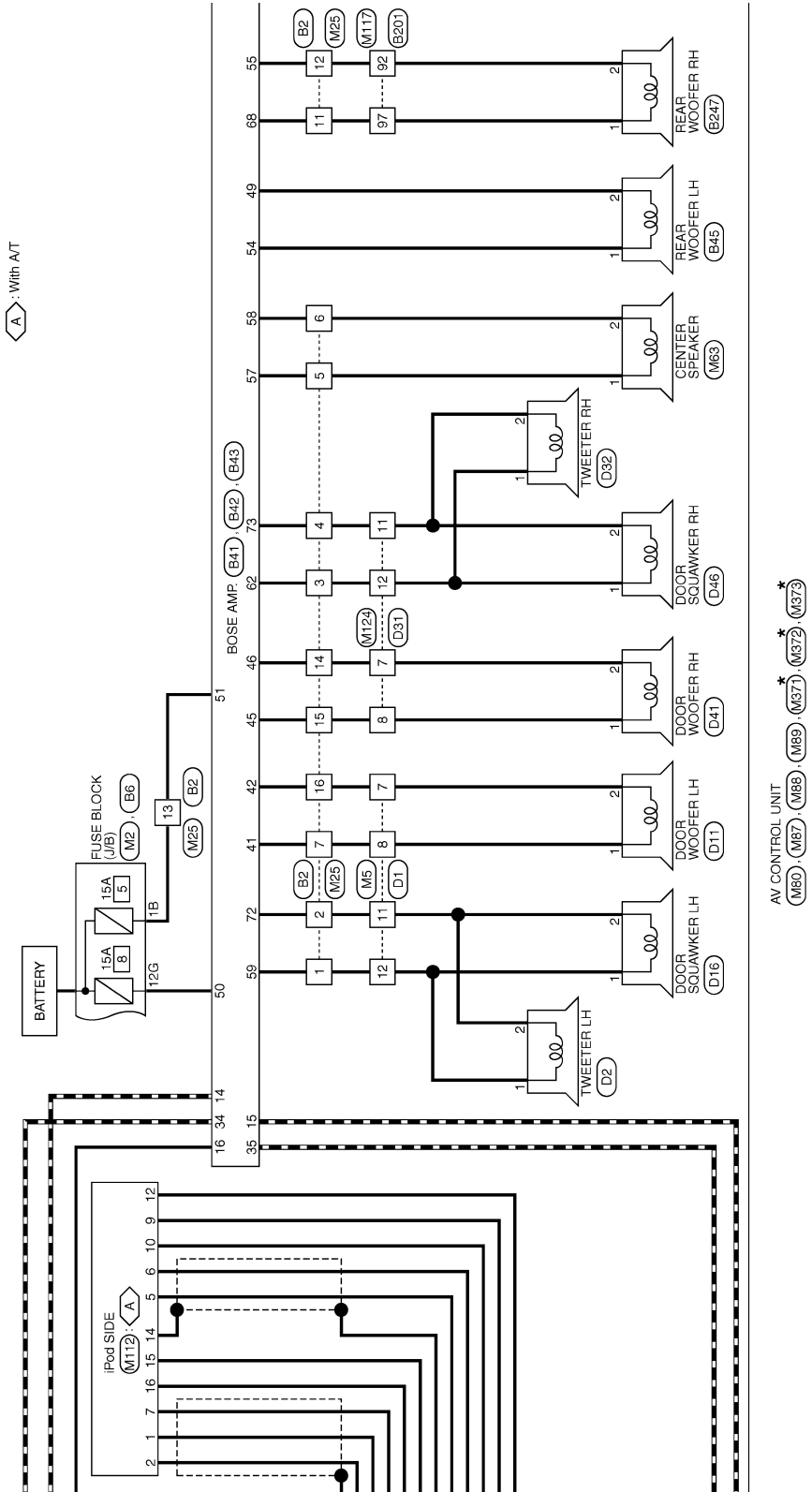
AV

JCNWA2436GB

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



\*: This connector is not shown in "Harness Layout".

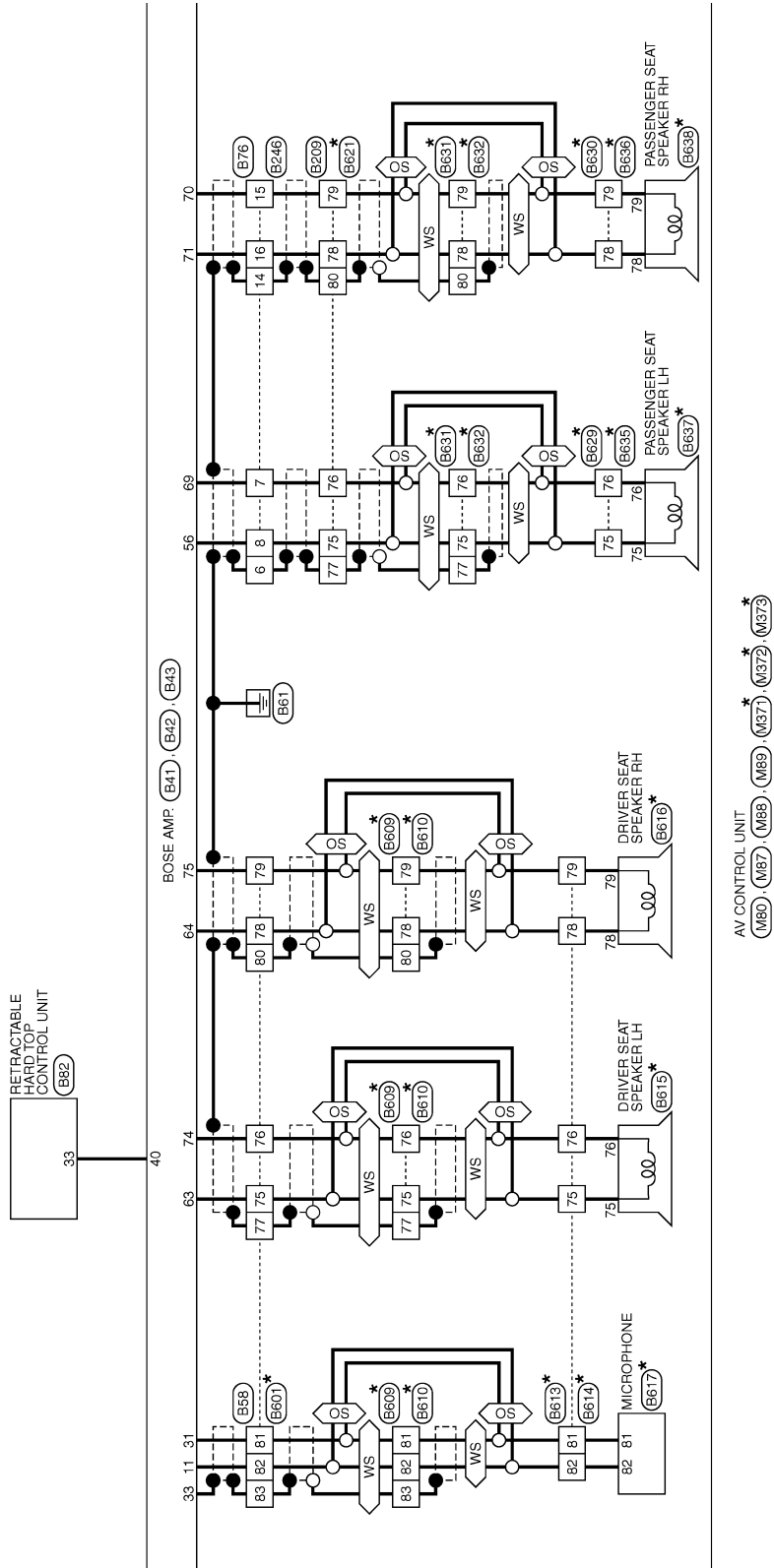
JCNWA2437GB

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

WS : With climate controlled seat  
 OS : Without climate controlled seat

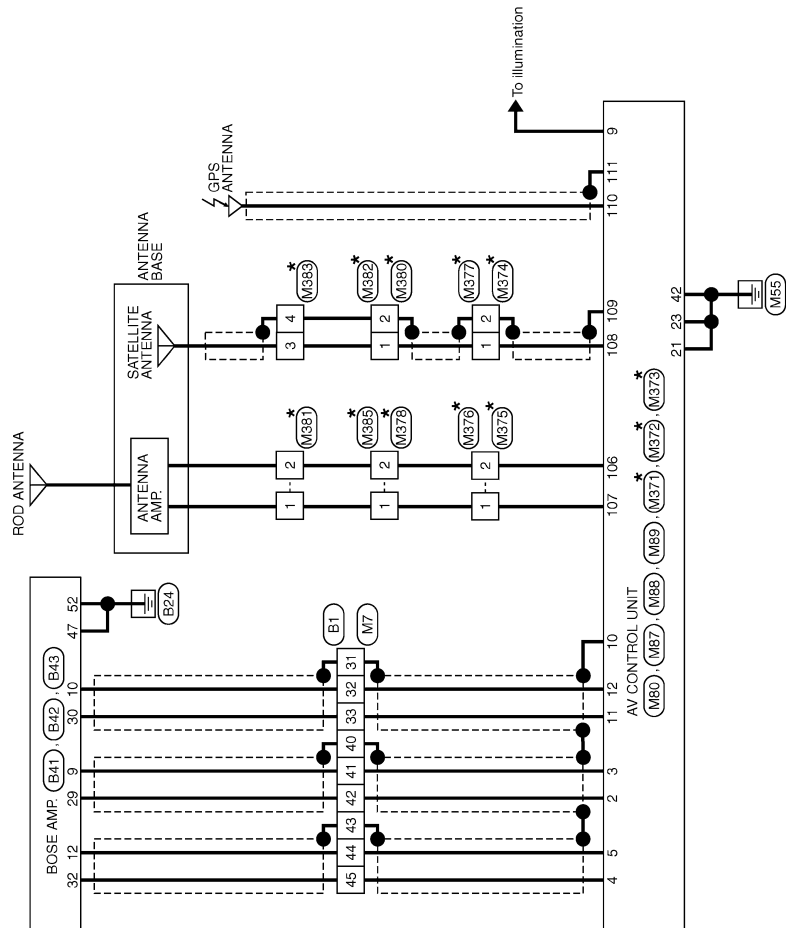


\*: This connector is not shown in "Harness Layout".

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JCNWA2438GB

# AV CONTROL UNIT



\* : This connector is not shown in "Harness Layout".

JCNWA2439GB

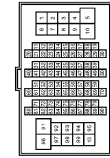
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
43	SHIELD	-
44	SB	-
45	V	-
46	W	-
48	R	- [With BOSE system]

50	G	- [With BOSE system]
57	V	-
61	O	-



Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS12BFS-CS

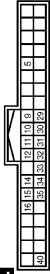


Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	PD1FB-A



Terminal No.	12G	Y	Signal Name [Specification]	-
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Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
9	L	SOUND SIGNAL LH (-)
10	G	SOUND SIGNAL RH (-)
11	G	MICROPHONE SIGNAL (-)
12	SB	VOICE GUIDANCE SIGNAL (-)
14	R	AV COMM (L)
15	P	AV COMM (L) ACC
16	W	ACC
29	P	SOUND SIGNAL LH (+)
30	R	SOUND SIGNAL RH (+)
31	Y	MICROPHONE SIGNAL (+)
32	V	VOICE GUIDANCE SIGNAL (+)

15	G	-
16	W	-

33	SHIELD	SHIELD
34	G	AV COMM (R)
35	L	AV COMM (L)
40	V	ROOF STATUS SIGNAL (AUDIO)

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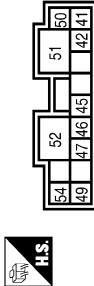
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

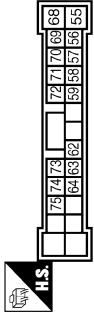
[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SGM12FBR-SJM2



Connector No.	B43
Connector Name	BOSE AMP.
Connector Type	SCA18FBR-SG44



71	Y	SOUND SIGNAL FR RH HEADREST RH (+)
72	W	SOUND SIGNAL FRONT LH (-)
73	LG	SOUND SIGNAL FRONT RH (-)
74	Y	SOUND SIGNAL FR LH HEADREST LH (-)
75	B	SOUND SIGNAL FR LH HEADREST RH (-)

Connector No.	B45
Connector Name	REAR WOOFER LH
Connector Type	NS12ZFW-CS

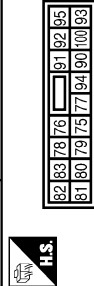


Terminal No.	Color of Wire	Signal Name [Specification]
41	B	SOUND SIGNAL DOOR WOOFER LH (+)
42	W	SOUND SIGNAL DOOR WOOFER LH (-)
45	G	SOUND SIGNAL DOOR WOOFER RH (+)
46	R	SOUND SIGNAL DOOR WOOFER RH (-)
47	B	GND
49	P	SOUND SIGNAL WOOFER REAR LH (-)
50	Y	BATTERY
51	GR	BATTERY
52	B	GND
54	L	SOUND SIGNAL WOOFER REAR LH (+)

Terminal No.	Color of Wire	Signal Name [Specification]
55	O	SOUND SIGNAL WOOFER REAR RH (-)
56	W	SOUND SIGNAL FR RH HEADREST LH (+)
57	O	SOUND SIGNAL CENTER (+)
58	P	SOUND SIGNAL CENTER (-)
59	L	SOUND SIGNAL FRONT LH (+)
62	V	SOUND SIGNAL FRONT RH (+)
63	G	SOUND SIGNAL FR LH HEADREST LH (+)
64	W	SOUND SIGNAL FR LH HEADREST RH (+)
68	LG	SOUND SIGNAL WOOFER REAR RH (+)
69	B	SOUND SIGNAL FR RH HEADREST LH (-)
70	G	SOUND SIGNAL FR RH HEADREST RH (-)

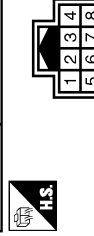
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	B58
Connector Name	WIRE TO WIRE
Connector Type	NS18FBR-CS



15	G	-
16	Y	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH108MP-NH



Terminal No.	Color of Wire	Signal Name [Specification]
75	G	-
76	Y	-
77	SHIELD	-
78	W	-
79	B	-
80	SHIELD	-
81	Y	-
82	G	-
83	SHIELD	-

Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	SHIELD	-

JCNWA2441GB

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

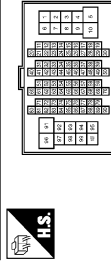
[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B32
Connector Name	RETRACTABLE HARD TOP CONTROL UNIT
Connector Type	TH40FW-NH



Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH60FW-CS16-TM4



Connector No.	B2109
Connector Name	WIRE TO WIRE
Connector Type	NS16FER-GS

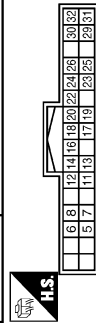


Terminal No.	Color of Wire	Signal Name [Specification]
33	V	ROOF STATUS SIGNAL (AUDIO)

Terminal No.	Color of Wire	Signal Name [Specification]
57	G	-
58	R	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	V	-
65	SB	-
66	Y	-
92	P	- [With BOSE system]
97	L	- [With BOSE system]

Terminal No.	Color of Wire	Signal Name [Specification]
75	W	-
76	B	-
77	SHIELD	-
78	Y	-
79	G	-
80	SHIELD	-

Connector No.	B241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH22FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	O	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (8-PULSE)
30	SB	ACC
31	B	GND
32	Y	BATTERY

Connector No.	B246
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (R)
19	R	AV COMM (L)
20	G	AV COMM (R)

Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

15	G
16	Y

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AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B247
Connector Name	REAR WOOFER RH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	B249
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	B309
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	Y	-
4	SHIELD	-

Connector No.	B311
Connector Name	REAR VIEW CAMERA
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	CAMERA ON SIGNAL
2	W	GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	B601
Connector Name	WIRE TO WIRE
Connector Type	NS16MR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B609
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B610
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B613
Connector Name	WIRE TO WIRE
Connector Type	FA08MW



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
78	R	-
79	G	-
81	B	-
82	W	-

JCNWA2443GB



# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B614
Connector Name	WIRE TO WIRE
Connector Type	20BFW



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-
78	-	-
79	-	-
81	-	-
82	-	-

Connector No.	B615
Connector Name	DRIVER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B616
Connector Name	DRIVER SEAT SPEAKER RH
Connector Type	TK02FW



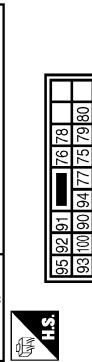
Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B617
Connector Name	MICROPHONE
Connector Type	TK02FBR



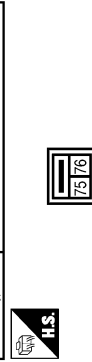
Terminal No.	Color of Wire	Signal Name [Specification]
81	-	-
82	-	-

Connector No.	B621
Connector Name	WIRE TO WIRE
Connector Type	NS16BFR-CS



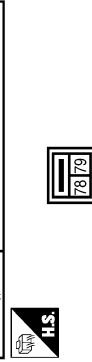
Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B629
Connector Name	WIRE TO WIRE
Connector Type	TK02MGY



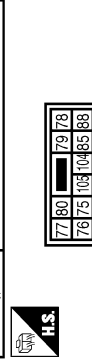
Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-

Connector No.	B630
Connector Name	WIRE TO WIRE
Connector Type	TK02MMW



Terminal No.	Color of Wire	Signal Name [Specification]
78	R	-
79	G	-

Connector No.	B631
Connector Name	WIRE TO WIRE
Connector Type	NS10MMY-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

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# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B637
Connector Name	PASSENGER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B638
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B635
Connector Name	WIRE TO WIRE
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B632
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	D11
Connector Name	DOOR WOOFER LH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	D2
Connector Name	TWEETER LH
Connector Type	TK02MR-P



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	W	-
12	L	-

Connector No.	B638
Connector Name	PASSENGER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

JCNWA2445GB

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	D16
Connector Name	DOOR SQUAWKER LH
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	W	-
12	L	-

Connector No.	D32
Connector Name	TWEETER RH
Connector Type	TK02MBR-P



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	D41
Connector Name	DOOR WOOFER RH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	D46
Connector Name	DOOR SQUAWKER RH
Connector Type	TK02FBR



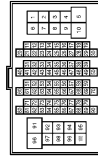
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	E5
Connector Name	INTELLIGENT POWER DISTRIBUTION MODULE
Connector Type	TH20FW-CS12-M-TV



Terminal No.	Color of Wire	Signal Name [Specification]
25	G	-

Connector No.	E06
Connector Name	WIRE TO WIRE
Connector Type	TH60FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
69	W	-
89	O	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH (WITH A/T)
Connector Type	TB01FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-


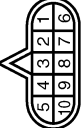



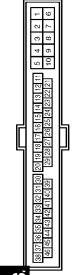

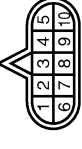





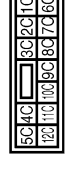

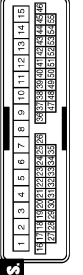
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# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>F51</td></tr> <tr><td>Connector Name</td><td>A/T ASSEMBLY</td></tr> <tr><td>Connector Type</td><td>RK1DFG-D0Y</td></tr> </table>  	Connector No.	F51	Connector Name	A/T ASSEMBLY	Connector Type	RK1DFG-D0Y	<table border="1"> <tr><td>Terminal No.</td><td>7</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Terminal No.	7	Color of Wire	R	Signal Name [Specification]																			
Connector No.	F51																														
Connector Name	A/T ASSEMBLY																														
Connector Type	RK1DFG-D0Y																														
Terminal No.	7																														
Color of Wire	R																														
Signal Name [Specification]																															
<table border="1"> <tr><td>Connector No.</td><td>F56</td></tr> <tr><td>Connector Name</td><td>BACK-UP LAMP SWITCH</td></tr> <tr><td>Connector Type</td><td>RK02FB</td></tr> </table>  	Connector No.	F56	Connector Name	BACK-UP LAMP SWITCH	Connector Type	RK02FB	<table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Terminal No.	1	Color of Wire	R	Signal Name [Specification]		Terminal No.	2	Color of Wire	O	Signal Name [Specification]													
Connector No.	F56																														
Connector Name	BACK-UP LAMP SWITCH																														
Connector Type	RK02FB																														
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Color of Wire	R																														
Signal Name [Specification]																															
Terminal No.	2																														
Color of Wire	O																														
Signal Name [Specification]																															
<table border="1"> <tr><td>Connector No.</td><td>F103</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>1K38FW-NS10</td></tr> </table>  	Connector No.	F103	Connector Name	WIRE TO WIRE	Connector Type	1K38FW-NS10	<table border="1"> <tr><td>Terminal No.</td><td>30</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>31</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>41</td></tr> <tr><td>Color of Wire</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Terminal No.	30	Color of Wire	R	Signal Name [Specification]		Terminal No.	31	Color of Wire	R	Signal Name [Specification]		Terminal No.	41	Color of Wire	O	Signal Name [Specification]							
Connector No.	F103																														
Connector Name	WIRE TO WIRE																														
Connector Type	1K38FW-NS10																														
Terminal No.	30																														
Color of Wire	R																														
Signal Name [Specification]																															
Terminal No.	31																														
Color of Wire	R																														
Signal Name [Specification]																															
Terminal No.	41																														
Color of Wire	O																														
Signal Name [Specification]																															
<table border="1"> <tr><td>Connector No.</td><td>F157</td></tr> <tr><td>Connector Name</td><td>TCM (TRANSMISSION CONTROL MODULE)</td></tr> <tr><td>Connector Type</td><td>SP1DFG</td></tr> </table>  	Connector No.	F157	Connector Name	TCM (TRANSMISSION CONTROL MODULE)	Connector Type	SP1DFG	<table border="1"> <tr><td>Terminal No.</td><td>7</td></tr> <tr><td>Color of Wire</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td>REV/LAMP RLY</td></tr> </table>	Terminal No.	7	Color of Wire	L	Signal Name [Specification]	REV/LAMP RLY																		
Connector No.	F157																														
Connector Name	TCM (TRANSMISSION CONTROL MODULE)																														
Connector Type	SP1DFG																														
Terminal No.	7																														
Color of Wire	L																														
Signal Name [Specification]	REV/LAMP RLY																														
<table border="1"> <tr><td>Connector No.</td><td>M1</td></tr> <tr><td>Connector Name</td><td>FUSE BLOCK (J/B)</td></tr> <tr><td>Connector Type</td><td>NS08FW-M2</td></tr> </table>  	Connector No.	M1	Connector Name	FUSE BLOCK (J/B)	Connector Type	NS08FW-M2	<table border="1"> <tr><td>Terminal No.</td><td>2A</td></tr> <tr><td>Color of Wire</td><td>G</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>5A</td></tr> <tr><td>Color of Wire</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Terminal No.	2A	Color of Wire	G	Signal Name [Specification]		Terminal No.	5A	Color of Wire	L	Signal Name [Specification]													
Connector No.	M1																														
Connector Name	FUSE BLOCK (J/B)																														
Connector Type	NS08FW-M2																														
Terminal No.	2A																														
Color of Wire	G																														
Signal Name [Specification]																															
Terminal No.	5A																														
Color of Wire	L																														
Signal Name [Specification]																															
<table border="1"> <tr><td>Connector No.</td><td>M2</td></tr> <tr><td>Connector Name</td><td>FUSE BLOCK (J/B)</td></tr> <tr><td>Connector Type</td><td>NS10FW-CS</td></tr> </table>  	Connector No.	M2	Connector Name	FUSE BLOCK (J/B)	Connector Type	NS10FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1B</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>1B</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td>- [With MAVI]</td></tr> </table>	Terminal No.	1B	Color of Wire	R	Signal Name [Specification]		Terminal No.	1B	Color of Wire	R	Signal Name [Specification]	- [With MAVI]												
Connector No.	M2																														
Connector Name	FUSE BLOCK (J/B)																														
Connector Type	NS10FW-CS																														
Terminal No.	1B																														
Color of Wire	R																														
Signal Name [Specification]																															
Terminal No.	1B																														
Color of Wire	R																														
Signal Name [Specification]	- [With MAVI]																														
<table border="1"> <tr><td>Connector No.</td><td>M3</td></tr> <tr><td>Connector Name</td><td>FUSE BLOCK (J/B)</td></tr> <tr><td>Connector Type</td><td>NS12FW-CS</td></tr> </table>  	Connector No.	M3	Connector Name	FUSE BLOCK (J/B)	Connector Type	NS12FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>12C</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Terminal No.	12C	Color of Wire	R	Signal Name [Specification]																			
Connector No.	M3																														
Connector Name	FUSE BLOCK (J/B)																														
Connector Type	NS12FW-CS																														
Terminal No.	12C																														
Color of Wire	R																														
Signal Name [Specification]																															
<table border="1"> <tr><td>Connector No.</td><td>M5</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40MP-CS15</td></tr> </table>  	Connector No.	M5	Connector Name	WIRE TO WIRE	Connector Type	TH40MP-CS15	<table border="1"> <tr><td>Terminal No.</td><td>7</td></tr> <tr><td>Color of Wire</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>8</td></tr> <tr><td>Color of Wire</td><td>B</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>11</td></tr> <tr><td>Color of Wire</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>12</td></tr> <tr><td>Color of Wire</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Terminal No.	7	Color of Wire	W	Signal Name [Specification]		Terminal No.	8	Color of Wire	B	Signal Name [Specification]		Terminal No.	11	Color of Wire	W	Signal Name [Specification]		Terminal No.	12	Color of Wire	L	Signal Name [Specification]	
Connector No.	M5																														
Connector Name	WIRE TO WIRE																														
Connector Type	TH40MP-CS15																														
Terminal No.	7																														
Color of Wire	W																														
Signal Name [Specification]																															
Terminal No.	8																														
Color of Wire	B																														
Signal Name [Specification]																															
Terminal No.	11																														
Color of Wire	W																														
Signal Name [Specification]																															
Terminal No.	12																														
Color of Wire	L																														
Signal Name [Specification]																															

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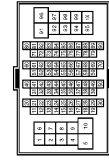
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

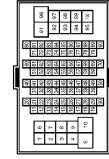
[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M16
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



50	G	- [With BOSE system]
57	O	-
61	O	-

Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
69	G	-
89	O	-

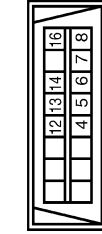
Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
43	SHIELD	-
44	Y	-
45	BR	-
46	V	- [With NAVI]
49	R	- [With BOSE system]

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	SB	-
5	Y	-
6	LG	-
7	B	-
11	L	-
12	P	-
13	R	- [With NAVI]
14	R	-

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A  
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AV

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

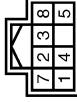
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



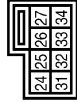
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	LG	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-IV



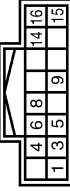
Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M29
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



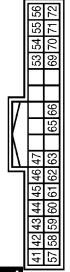
Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	AOC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

Connector No.	M89
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LC



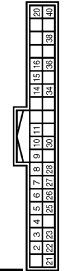
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH02FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M68
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH00FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (8-PULSE)

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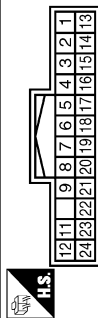
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[BOSE AUDIO WITH NAVIGATION]

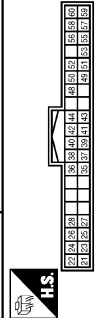
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	LG	ACC
4	B	SHIELD
5	R	AUX IMAGE GND
6	B	RGB (GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
11	L	COMM (CONT->DISP)
12	W	CAMERA IMAGE SIGNAL

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH04FW-NH



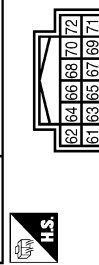
Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
36	G	IGNITION
36	SB	PARKING BRAKE
37	O	REVERSE

13	B	GND
14	SHIELD	SHIELD
15	G	AUX IMAGE SIGNAL
17	W	RGB (RED) SIGNAL
18	R	RGB (BLUE) SIGNAL
19	G	RGB SYNC
20	W	VP
21	SHIELD	SHIELD
22	P	COMM (DISP->CONT)
23	SHIELD	SHIELD

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	SOUND SIGNAL LH (+)
3	L	SOUND SIGNAL LH (-)
4	BR	VOICE GUIDANCE SIGNAL (+)
5	Y	VOICE GUIDANCE SIGNAL (-)
6	P	STRG SW A
7	GR	ACC
9	L	ILLUMINATION
10	B	SHIELD
11	R	SOUND SIGNAL RH (+)
12	G	SOUND SIGNAL RH (-)
15	B	STRG SW GND

38	GR	VEHICLE SPEED (8 PULSE)
40	GR	CAMERA CONNECTION RECOGNITION
42	B	Control Signal 2
48	V	AV COMM (H)
49	LG	AV COMM (L)
50	G	AV COMM (H)
51	R	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
61	W	RGB (RED) SIGNAL
62	B	RGB (GREEN) SIGNAL
63	R	RGB (BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA (YS) SIGNAL
68	R	HP
69	W	VP
70	L	COMM (CONT->DISP)
71	P	COMM (DISP->CONT)

16	L	STRG SW B
19	Y	BATTERY

72	SHIELD	SHIELD
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A  
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C  
D  
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F  
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H  
I  
J  
K  
L  
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N  
O  
P

AV

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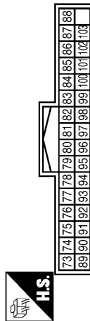
# AV CONTROL UNIT

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[BOSE AUDIO WITH NAVIGATION]

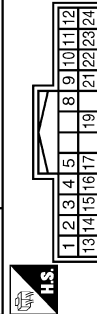
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH24FW-NH



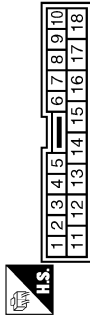
Terminal No.	Color of Wire	Signal Name [Specification]
79	R	iPod SOUND SIGNAL LH (+)
80	B	iPod SOUND SIGNAL RH (+)
81	SHIELD	SHIELD
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	W	AUX SOUND SIGNAL LH (+)
88	B	AUX SOUND SIGNAL GND
95	W	iPod SOUND SIGNAL LH (-)
96	G	iPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	R	AUX SOUND SIGNAL RH (+)

Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod ADAPTER->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTIFY
12	W	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

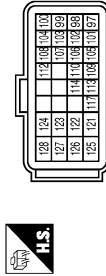
Connector No.	M106
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	- [With NAVI]
2	G	- [With NAVI]
3	SHIELD	- [With NAVI]

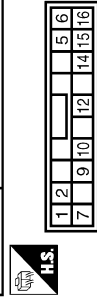
14	G	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	R	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-RZ6-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

Connector No.	M112
Connector Name	iPod SIDE (WITH A/T)
Connector Type	IP16FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

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# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

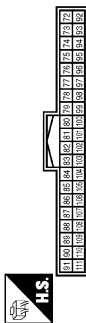
### BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M114
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	O	-
4	SHIELD	-
5	W	-
6	B	-
7	R	-
8	BR	-
9	W	-
10	W	-
11	SHIELD	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH0UFB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

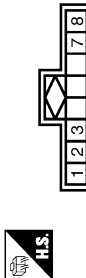
12	P	-
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Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MW-NS/D



Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL LH (+)
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MH-CS/6-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
57	V	-
58	LG	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	P	-
65	SB	-
66	Y	-
92	P	-
97	L	-

Connector No.	M155
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R	-
4	W	-
5	B	-
6	SHIELD	-
7	G	-
8	R	-

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A B C D E F G H I J K L M AV O P

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

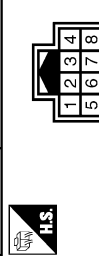
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M181
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	G	
3	O	
4	SHIELD	
5	W	
6	B	
7	R	
8	BR	
9	W	
10	L	
11	SHIELD	

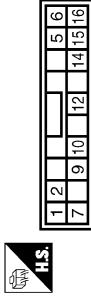
Connector No.	M381
Connector Name	WIRE TO WIRE
Connector Type	TH10BMW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	SHIELD	
6	SHIELD	
7	G	
8	R	

12	P	-
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Connector No.	M182
Connector Name	iPod SIDE (WITH M/T)
Connector Type	IP16FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	L	iPod CONNECTION RECOGNITION GND
10	BR	
12	W	CHARGE POWER
14	SHIELD	
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT13S1F-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
106	-	AM-FM MAIN
107	-	ANTENNA AMP. ON SIGNAL

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	-	
15	-	
17	-	

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FAKRA JACK



Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SATELLITE ANTENNA
109	-	SHIELD

















JCNWA2453GB

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>M373</td></tr> <tr><td>Connector Name</td><td>AV CONTROL UNIT (WITH NAVI)</td></tr> <tr><td>Connector Type</td><td>GTBS-1PP-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>110</td></tr> <tr><td>Color of Wire</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>GPS ANTENNA SHIELD</td></tr> <tr><td>Terminal No.</td><td>111</td></tr> <tr><td>Color of Wire</td><td>-</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Connector No.	M373	Connector Name	AV CONTROL UNIT (WITH NAVI)	Connector Type	GTBS-1PP-HU	Terminal No.	110	Color of Wire	-	Signal Name [Specification]	GPS ANTENNA SHIELD	Terminal No.	111	Color of Wire	-	Signal Name [Specification]	-	<table border="1"> <tr><td>Connector No.</td><td>M374</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>FAKRA</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> 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JCNWA2454GB

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
3	--	SATELLITE ANTENNA
4	--	SHIELD

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TKGFW-NSB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-- [With NAVI]
2	G	-- [With NAVI]
3	SHIELD	--

Connector No.	R7
Connector Name	MICROPHONE
Connector Type	TKGFW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	MICROPHONE SIGNAL [With NAVI]
2	SHIELD	MICROPHONE GND
4	W	MICROPHONE VCC [With NAVI]

JCNWA2455GB

## Fail-Safe

INFOID:000000004371853

When the ambient temperature becomes extremely low or extremely high, or when HDD is malfunctioning, AV control unit displays the message and limits the AV control unit function.

### FAIL-SAFE CONDITIONS

- When the ambient temperature is  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ) or lower, or when it is  $70^{\circ}\text{C}$  ( $158^{\circ}\text{F}$ ) or higher
- when HDD is malfunctioning

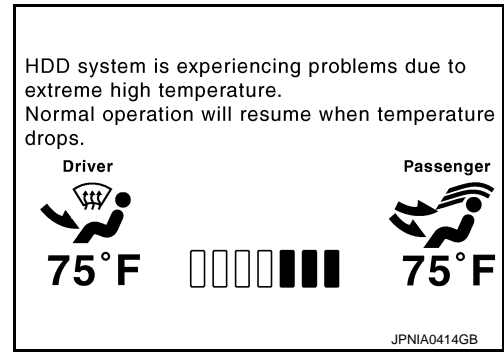
# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## Display

The messages displayed on fail-safe conditions are as shown below:



Fail-safe mode	Display (display of the fail-safe condition)
When HDD temperature is low	HDD system is experiencing problems due to extreme low temperature. Normal operation will resume when temperature rises.
When HDD temperature is high	HDD system is experiencing problems due to extreme high temperature. Normal operation will resume when temperature drops.
When HDD is malfunctioning	HDD system is not functioning. Please contact your dealer for assistance.

## DESCRIPTION OF CONTROLS

Function		When Fail-safe Function is activated
Air conditioner	Operation	Only multifunction switch (preset switch) can be operated.
	Display	<ul style="list-style-type: none"> <li>• LED of multifunction switch (preset switch) illuminates.</li> <li>• Aimed temperature, blow angle, and flow rate are displayed in simplified mode.</li> </ul>
Audio	Operation	Only ON/OFF and volume control operations by multifunction switch (preset switch) are possible.
	Display	No display ("Fail-safe mode" is displayed)
Camera	Operation	Image tone cannot be controlled.
	Display	Cannot be superimposed. (warning display, tone control display)
Hands-free phone	Operation	Cannot be operated.
Navigation	Operation	Cannot be operated.
Self diagnosis		The display in simplified mode of fail-safe condition
CONSULT-III diagnosis		Cannot be operated.

### Ability Operation Mode

There is an ability operation mode for Fail-safes due to low or high ambient temperature.

If HDD data can be read, fail-safe is shown, then normal displays are displayed only for functions which can be operated.

### RELEASE CONDITIONS OF FAIL-SAFE

Fail-safe is released on following conditions and normal mode is restored.

When the temperature of HDD is low or high

If the ambient temperature becomes out of fail-safe condition range, normal mode is restored.

When HDD is malfunctioning

If the malfunction disappears, normal mode is restored.

### NOTE:

- If fail-safe mode due to HDD malfunction is seen continuously, replace AV control unit.
- If fail-safe mode due to HDD malfunction is seen temporarily, check the "Error History" of Confirmation/Adjustment mode. If this is normal, then continue the normal operation, observing the function. (It might be a temporary malfunction of HDD.)

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## DTC Index

INFOID:000000004371854

### SELF-DIAGNOSIS RESULTS DISPLAY ITEM

DTC	Display item	Refer to
U1000	CAN COMM CIRCUIT [U1000]	<a href="#">AV-525, "Diagnosis Procedure"</a>
U1010	CONTROL UNIT (CAN) [1010]	<a href="#">AV-526, "Diagnosis Procedure"</a>
U1310	CONTROL UNIT (AV) [U1310]	<a href="#">AV-527, "DTC Logic"</a>
U1200	Control Unit FLASH-ROM [1200]	<a href="#">AV-528, "DTC Logic"</a>
U1201	GYRO NO CONN [1201]	<a href="#">AV-529, "DTC Logic"</a>
U1216	CAN CONT [U1216]	<a href="#">AV-530, "DTC Logic"</a>
U1217	BLUETOOTH MODULE CONN [U1217]	<a href="#">AV-531, "DTC Logic"</a>
U1218	HDD CONN [U1218]	<a href="#">AV-532, "DTC Logic"</a>
U1219	HDD READ [U1219]	<a href="#">AV-533, "DTC Logic"</a>
U1220	XM SERIAL COMM [U1220]	<a href="#">AV-534, "DTC Logic"</a>
U121A	HDD-WRITE [U121A]	<a href="#">AV-535, "DTC Logic"</a>
U121B	HDD-COMM [U121B]	<a href="#">AV-536, "DTC Logic"</a>
U121C	HDD-ACCESS [U121C]	<a href="#">AV-537, "DTC Logic"</a>
U121D	DSP CONN [U121D]	<a href="#">AV-538, "DTC Logic"</a>
U121E	DSP COMM [U121E]	<a href="#">AV-539, "DTC Logic"</a>
U121F	INTERNAL COMM [U121F]	<a href="#">AV-540, "DTC Logic"</a>
U1204	GPS COMM [U1204]	<a href="#">AV-541, "DTC Logic"</a>
U1205	GPS ROM [U1205]	<a href="#">AV-542, "DTC Logic"</a>
U1206	GPS RAM [U1206]	<a href="#">AV-543, "DTC Logic"</a>
U1207	GPS RTC [U1207]	<a href="#">AV-544, "DTC Logic"</a>
U1231	AMP TEMP [U1231]	<a href="#">AV-545, "DTC Logic"</a>
U1243	FRONT DISP CONN [U1243]	<a href="#">AV-546, "DTC Logic"</a>
U1244	GPS ANTENNA CONN [U1244]	<a href="#">AV-548, "DTC Logic"</a>
U1250	CAMERA CONT. CONN [U1250]	<a href="#">AV-549, "DTC Logic"</a>
U1258	XM ANTENNA CONN [U1258]	<a href="#">AV-550, "DTC Logic"</a>
U1260	CENTER SP OPEN [U1260]	<a href="#">AV-551, "DTC Logic"</a>
U1261	CENTER SP SHORT [U1261]	<a href="#">AV-551, "DTC Logic"</a>
U1262	CENTER SP GND-SHORT [U1262]	<a href="#">AV-551, "DTC Logic"</a>
U1263	CENTER SP VB-SHORT [U1263]	<a href="#">AV-551, "DTC Logic"</a>
U1264	FR-DOOR SP OPEN [U1264]	<a href="#">AV-552, "DTC Logic"</a>
U1265	FR-DOOR SP SHORT [U1265]	<a href="#">AV-552, "DTC Logic"</a>
U1266	FR-DOOR SP GND-SHORT [U1266]	<a href="#">AV-552, "DTC Logic"</a>
U1267	FR-DOOR SP VB-SHORT [U1267]	<a href="#">AV-552, "DTC Logic"</a>
U1268	RR-SP/FR-WOOFER OPEN [U1268]	<a href="#">AV-553, "DTC Logic"</a>
U1269	RR-SP/FR-WOOFER SHORT [U1269]	<a href="#">AV-553, "DTC Logic"</a>
U126A	RR-SP/FR-WOOFER GND-SHORT [U126A]	<a href="#">AV-553, "DTC Logic"</a>
U126B	RR-SP/FR-WOOFER VB-SHORT [U126B]	<a href="#">AV-553, "DTC Logic"</a>
U126C	RR-SURROUND SP OPEN [U126C]	<a href="#">AV-554, "DTC Logic"</a>
U126D	RR-SURROUND SP SHORT [U126D]	<a href="#">AV-554, "DTC Logic"</a>

# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

DTC	Display item	Refer to
U126E	RR-SURROUND SP GND-SHORT [U126E]	<a href="#">AV-554, "DTC Logic"</a>
U126F	RR-SURROUND SP VB-SHORT [U126F]	<a href="#">AV-554, "DTC Logic"</a>
U1274	RL-SURROUND SP OPEN [U1274]	<a href="#">AV-555, "DTC Logic"</a>
U1275	RL-SURROUND SP SHORT [U1275]	<a href="#">AV-555, "DTC Logic"</a>
U1276	RL-SURROUND SP GND-SHORT [U1276]	<a href="#">AV-555, "DTC Logic"</a>
U1277	RL-SURROUND SP VB-SHORT [U1277]	<a href="#">AV-555, "DTC Logic"</a>
U1278	RL-SP/FL-WOOFER OPEN [U1278]	<a href="#">AV-556, "DTC Logic"</a>
U1279	RL-SP/FL-WOOFER SHORT [U1279]	<a href="#">AV-556, "DTC Logic"</a>
U127A	RL-SP/FL-WOOFER GND-SHORT [U127A]	<a href="#">AV-556, "DTC Logic"</a>
U127B	RL-SP/FL-WOOFER VB-SHORT [U127B]	<a href="#">AV-556, "DTC Logic"</a>
U127C	FL-DOOR SP OPEN [U127C]	<a href="#">AV-557, "DTC Logic"</a>
U127D	FL-DOOR SP SHORT [U127D]	<a href="#">AV-557, "DTC Logic"</a>
U127E	FL-DOOR SP GND-SHORT [U127E]	<a href="#">AV-557, "DTC Logic"</a>
U127F	FL-DOOR SP VB-SHORT [U127F]	<a href="#">AV-557, "DTC Logic"</a>
U1280	FL-SEAT L-SP OPEN [U1280]	<a href="#">AV-558, "DTC Logic"</a>
U1281	FL-SEAT L-SP SHORT [U1281]	<a href="#">AV-558, "DTC Logic"</a>
U1282	FL-SEAT L-SP GND-SHORT [U1282]	<a href="#">AV-558, "DTC Logic"</a>
U1283	FL-SEAT L-SP VB-SHORT [U1283]	<a href="#">AV-558, "DTC Logic"</a>
U1284	FL-SEAT R-SP OPEN [U1284]	<a href="#">AV-559, "DTC Logic"</a>
U1285	FL-SEAT R-SP SHORT [U1285]	<a href="#">AV-559, "DTC Logic"</a>
U1286	FL-SEAT R-SP GND-SHORT [U1286]	<a href="#">AV-559, "DTC Logic"</a>
U1287	FL-SEAT R-SP VB-SHORT [U1287]	<a href="#">AV-559, "DTC Logic"</a>
U1288	FR-SEAT L-SP OPEN [U1288]	<a href="#">AV-560, "DTC Logic"</a>
U1289	FR-SEAT L-SP SHORT [U1289]	<a href="#">AV-560, "DTC Logic"</a>
U128A	FR-SEAT L-SP GND-SHORT [U128A]	<a href="#">AV-560, "DTC Logic"</a>
U128B	FR-SEAT L-SP VB-SHORT [U128B]	<a href="#">AV-560, "DTC Logic"</a>
U128C	FR-SEAT R-SP OPEN [U128C]	<a href="#">AV-561, "DTC Logic"</a>
U128D	FR-SEAT R-SP SHORT [U128D]	<a href="#">AV-561, "DTC Logic"</a>
U128E	FR-SEAT R-SP GND-SHORT [U128E]	<a href="#">AV-561, "DTC Logic"</a>
U128F	FR-SEAT R-SP VB-SHORT [U128F]	<a href="#">AV-561, "DTC Logic"</a>
U1290	CORRECT MICRO OPEN [U1290]	<a href="#">AV-562, "DTC Logic"</a>
U1291	CORRECT MICRO SHORT [U1291]	<a href="#">AV-562, "DTC Logic"</a>
U1292	CORRECT MICRO GND-SHORT [U1292]	<a href="#">AV-562, "DTC Logic"</a>
U1293	CORRECT MICRO VB-SHORT [U1293]	<a href="#">AV-562, "DTC Logic"</a>
U1300 U121F	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• INTERNAL COMM [U121F]</li> </ul>	<a href="#">AV-564, "Description"</a>
U1300 U1240	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• SWITCH CONN [U1240]</li> </ul>	<a href="#">AV-564, "Description"</a>
U1300 U124E	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• AMP CONN [U124E]</li> </ul>	<a href="#">AV-564, "Description"</a>
U1300 U1252	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• REAR CAMERA LAN CONN [U1252]</li> </ul>	<a href="#">AV-564, "Description"</a>
U1300 U1254	<ul style="list-style-type: none"> <li>• AV COMM CIRCUIT [U1300]</li> <li>• IPOD CONN [U1254]</li> </ul>	<a href="#">AV-564, "Description"</a>

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# AV CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

DTC	Display item	Refer to
U1300 U1252 U124E	<ul style="list-style-type: none"><li>• AV COMM CIRCUIT [U1300]</li><li>• REAR CAMERA LAN CONN [U1252]</li><li>• AMP CONN [U124E]</li></ul>	<a href="#">AV-564, "Description"</a>
U1300 U1252 U1254 U124E	<ul style="list-style-type: none"><li>• AV COMM CIRCUIT [U1300]</li><li>• REAR CAMERA LAN CONN [U1252]</li><li>• IPOD CONN [U1254]</li><li>• AMP CONN [U124E]</li></ul>	<a href="#">AV-564, "Description"</a>
U1300 U1240 U1252 U1254 U124E	<ul style="list-style-type: none"><li>• AV COMM CIRCUIT [U1300]</li><li>• SWITCH CONN [U1240]</li><li>• REAR CAMERA LAN CONN [U1252]</li><li>• IPOD CONN [U1254]</li><li>• AMP CONN [U124E]</li></ul>	<a href="#">AV-564, "Description"</a>



# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

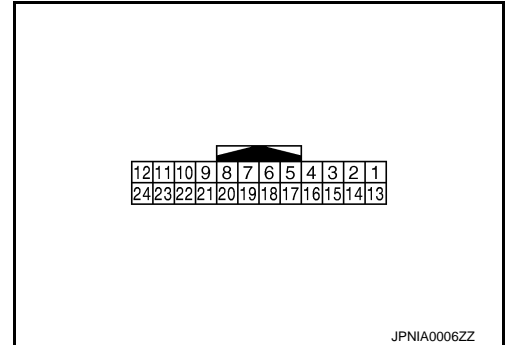
[BOSE AUDIO WITH NAVIGATION]

## DISPLAY UNIT

Reference Value

INFOID:000000004371855

TERMINAL LAYOUT



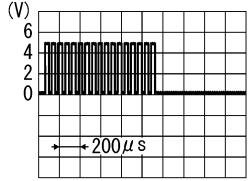
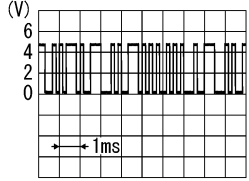
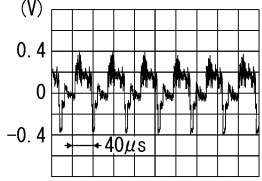
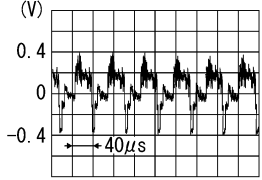
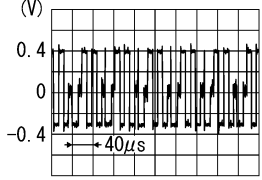
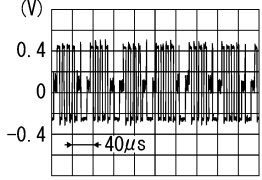
## PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
1 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
2 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
3 (LG)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
4 (B)	—	Shield	—	—	—	—
5 (R)	Ground	AUX image ground	—	Ignition switch ON	—	0 V
6 (B)	Ground	RGB signal (G: green)	Input	Ignition switch ON	Start confirmation/adjust- ment mode, and then dis- play color bar by selecting “Color Spectrum Bar” on DISPLAY DIAGNOSIS screen.	
7	—	Shield	—	—	—	—
8 (R)	Ground	Horizontal synchronizing (HP) signal	Output	Ignition switch ON	—	

# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

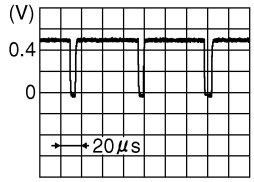
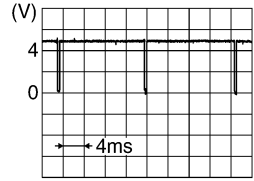
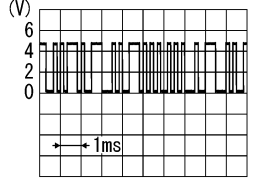
[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition	Reference value (Approx.)
+	-	Signal name	Input/ Output		
9 (B)	Ground	RGB area (YS) signal	Input	Ignition switch ON	At RGB image is displayed. 5.0 V
				Ignition switch ON	At rear view camera image is displayed. 
11 (L)	Ground	Communication signal (CONT→DISP)	Input	Ignition switch ON	When adjusting display brightness. 
12 (W)	Ground	Camera image signal	Input	Ignition switch ON	At rear view camera image is displayed. 
13 (B)	Ground	Ground	—	Ignition switch ON	— 0 V
14	—	Shield	—	—	—
15 (G)	Ground	AUX image signal	Input	Ignition switch ON	At AUX image is displayed. 
17 (W)	Ground	RGB signal (R: red)	Input	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen. 
18 (R)	Ground	RGB signal (B: blue)	Input	Ignition switch ON	Start confirmation/adjustment mode, and then display color bar by selecting "Color Spectrum Bar" on DISPLAY DIAGNOSIS screen. 

# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
19 (G)	Ground	RGB synchronizing signal	Input	Ignition switch ON	—	 <p>JPNIA0461GB</p>
20 (W)	Ground	Vertical synchronizing (VP) signal	Output	Ignition switch ON	—	 <p>SKIB3598E</p>
21	—	Shield	—	—	—	—
22 (P)	Ground	Communication signal (DISP→CONT)	Output	Ignition switch ON	When adjusting display brightness.	 <p>PKIB5039J</p>
23	—	Shield	—	—	—	—

## Wiring Diagram - BOSE AUDIO WITH NAVIGATION SYSTEM -

INFOID:000000004928938

**NOTE:**

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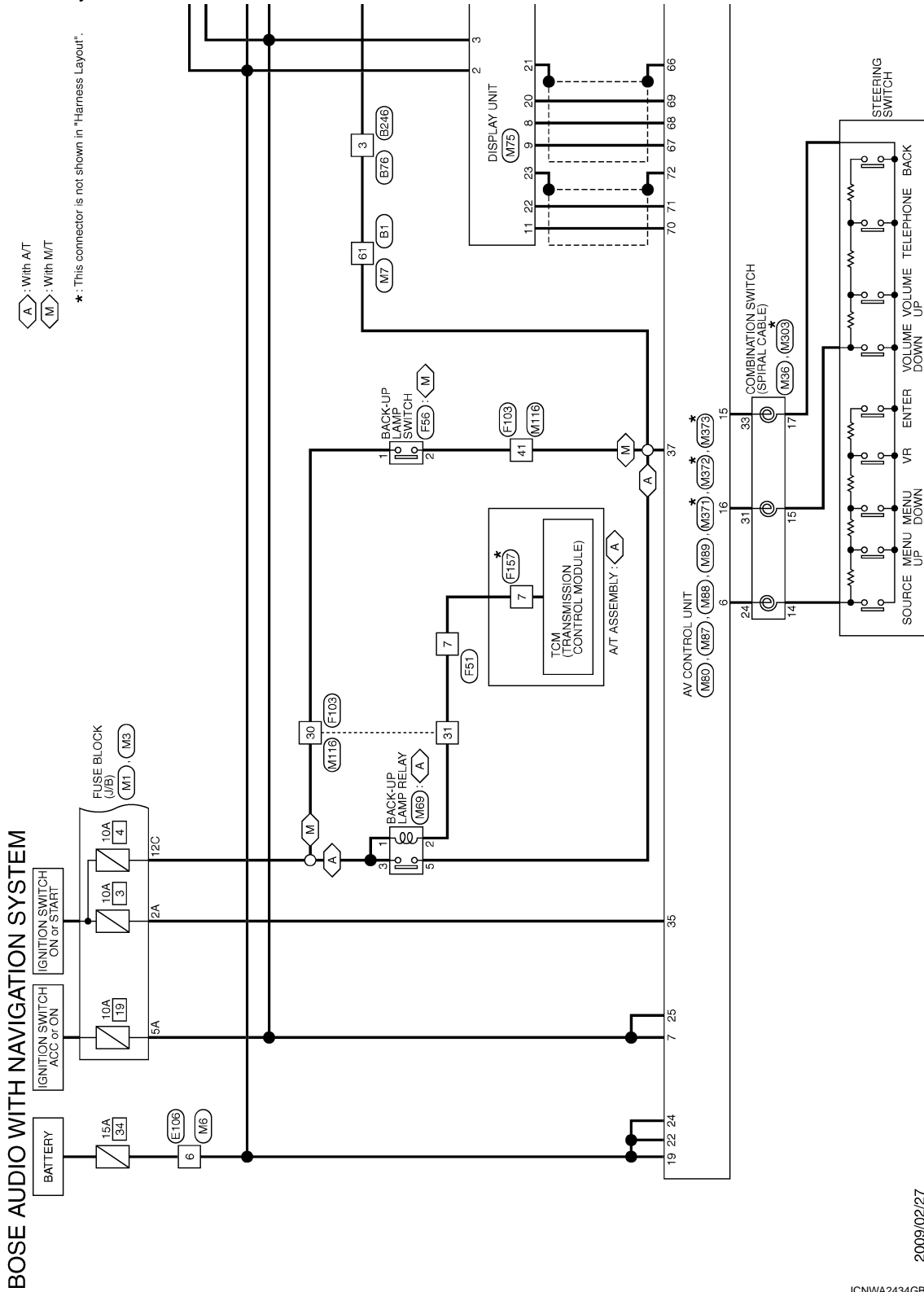
AV

# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

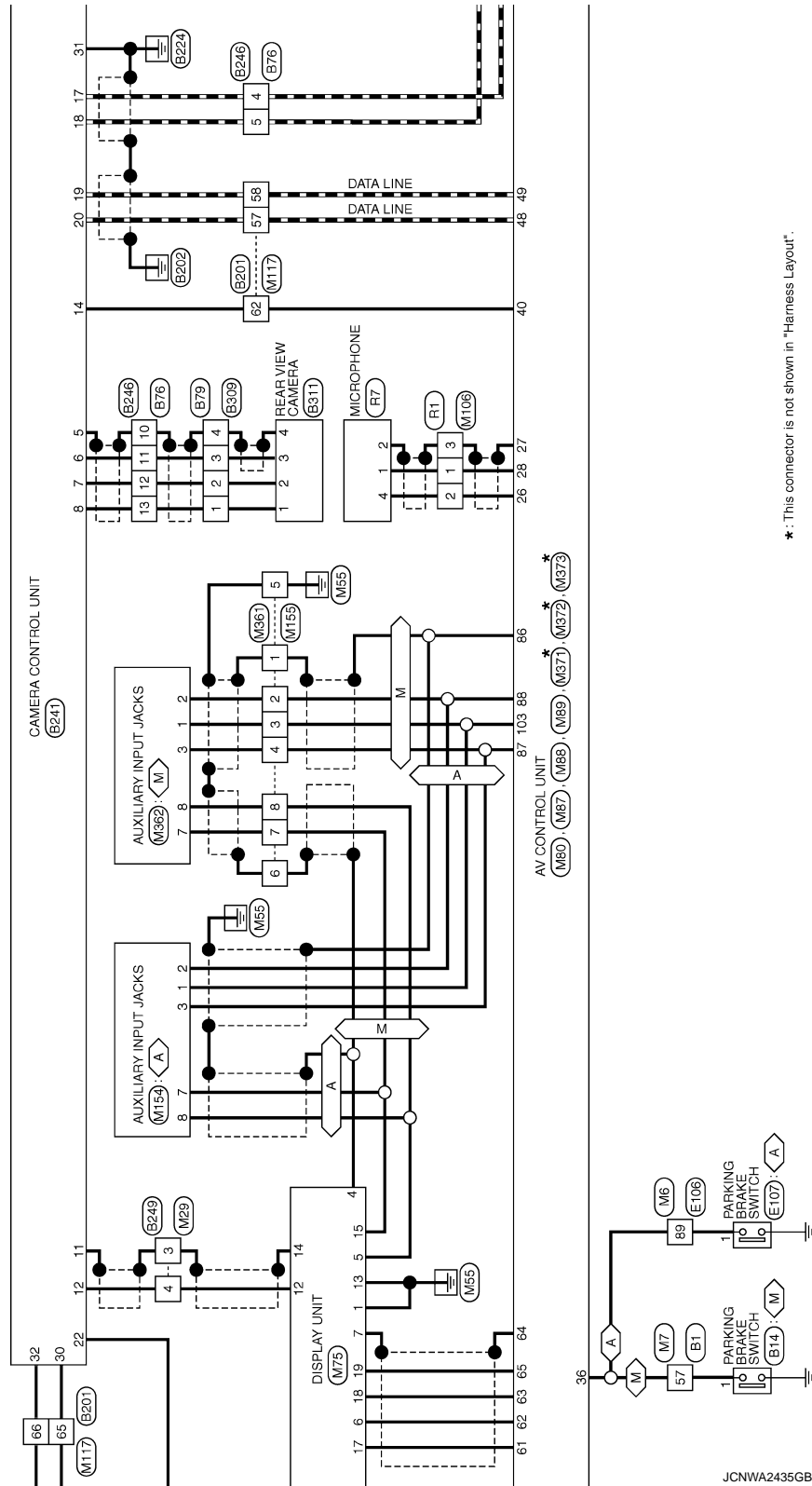


# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

⬠ A : With AVT  
⬠ M : With MFT



\*: This connector is not shown in "Harness Layout".

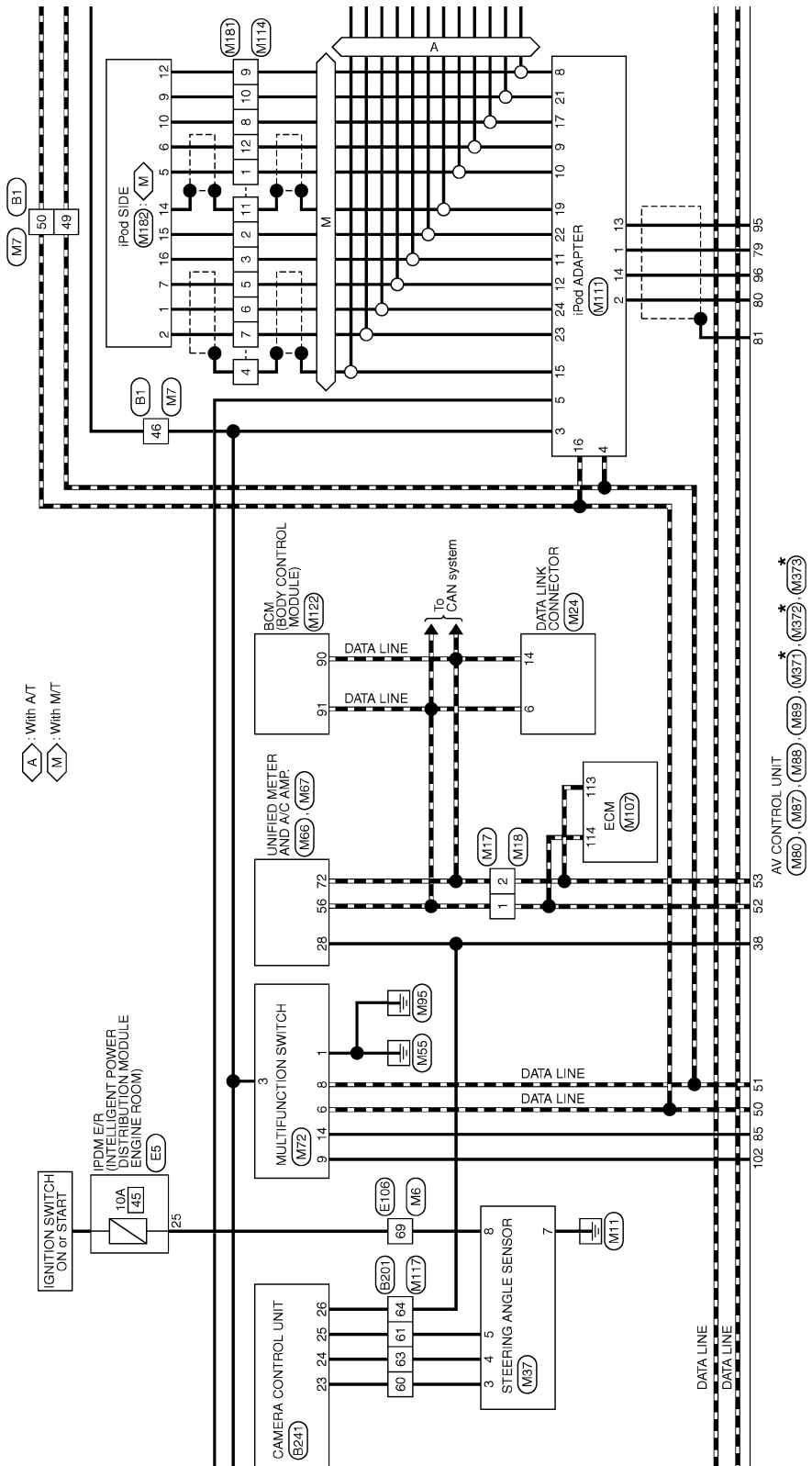
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AV

# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

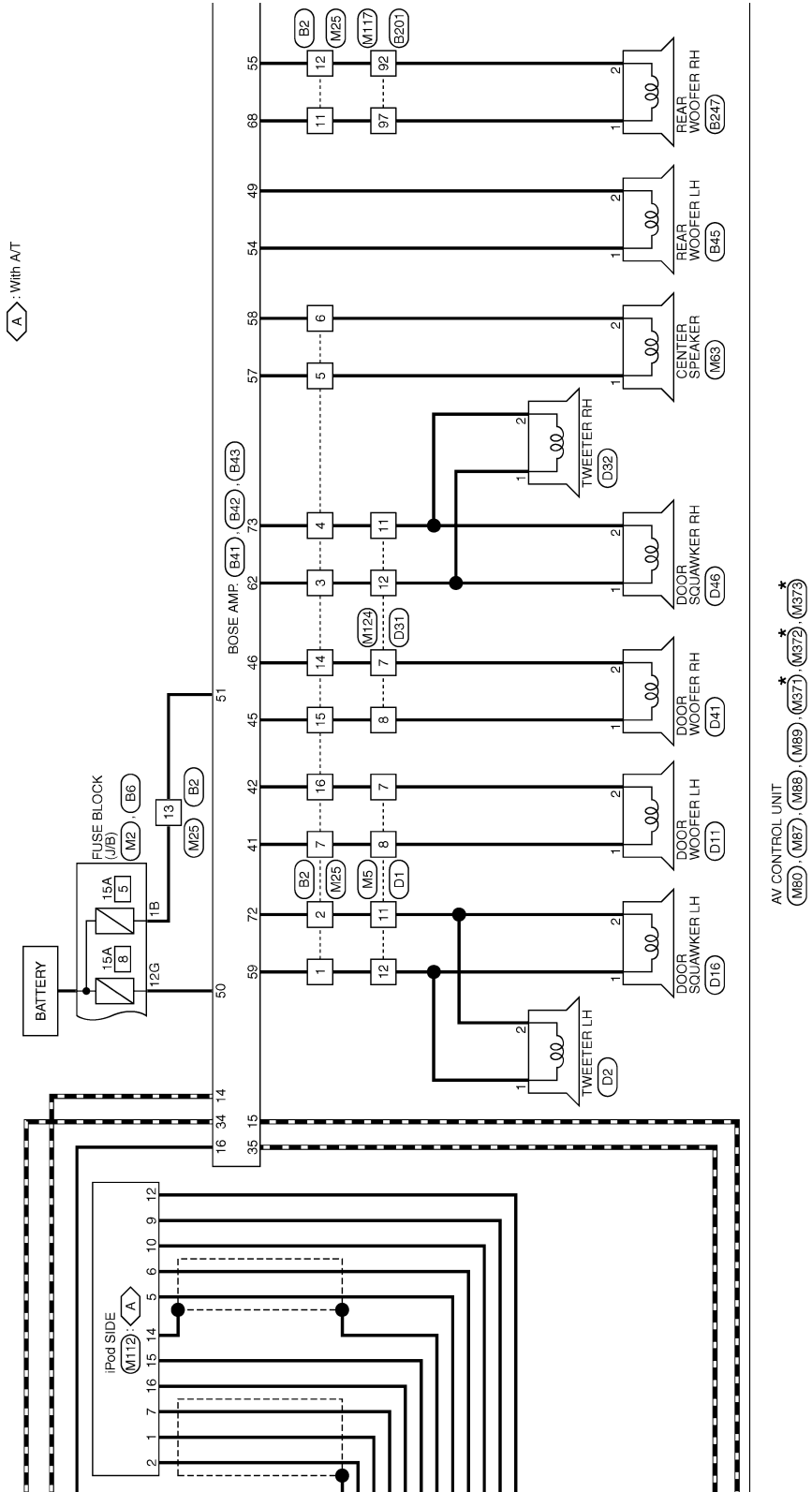


JCNWA2436GB

# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



Ⓐ : With A/T

\* : This connector is not shown in "Harness Layout".

AV CONTROL UNIT  
(M80) (M87) (M88) (M89) (M371) (M372) (M373)

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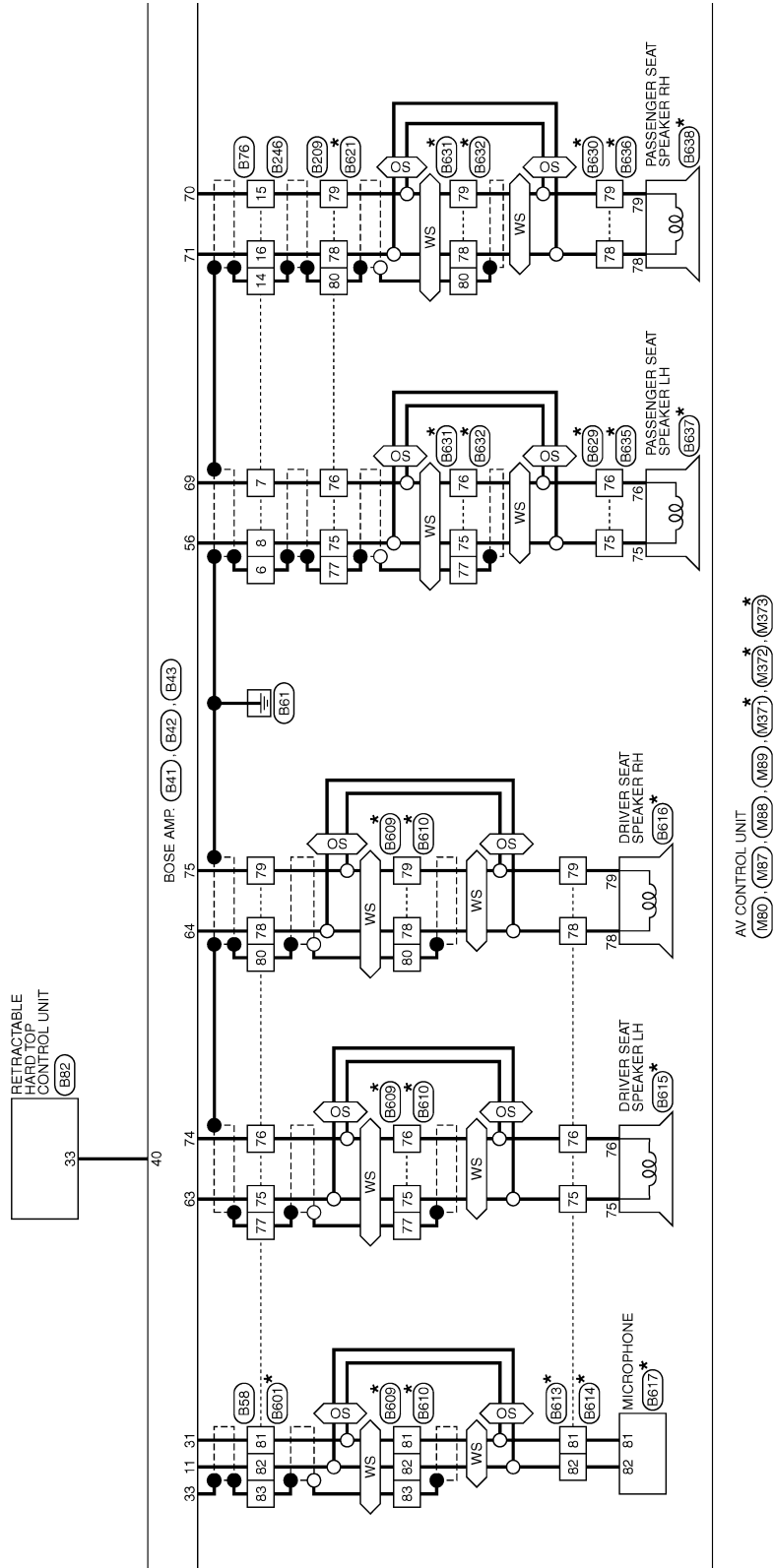
JCNWA2437GB

# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

WS: With climate controlled seat  
 OS: Without climate controlled seat

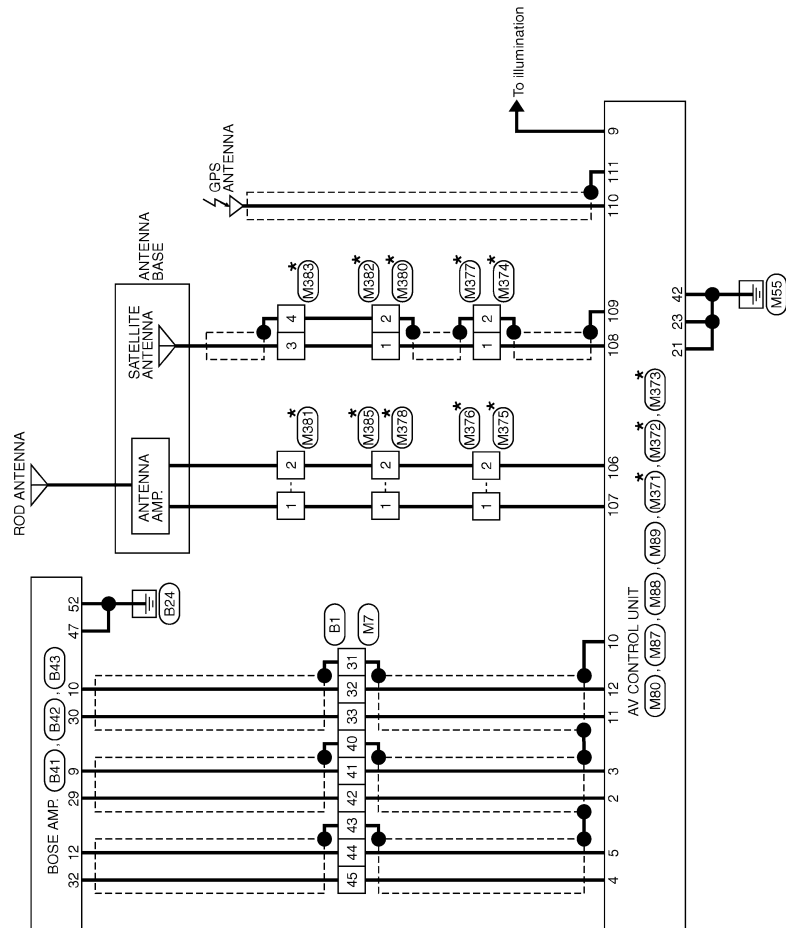


\*: This connector is not shown in "Harness Layout".

JCNWA2438GB



# DISPLAY UNIT



JCNWA2439GB

\*: This connector is not shown in "Harness Layout".

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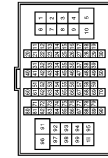
# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
43	SHIELD	-
44	SB	-
45	V	-
46	W	-
48	R	- [With BOSE system]



Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12BFR-CS



Terminal No.	12G	Y	-
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50	G	- [With BOSE system]
57	V	-
61	O	-



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-



Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	PD1FB-A



Terminal No.	1	V	-
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Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-



Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	TH4DFW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
9	L	SOUND SIGNAL LH (-)
10	G	SOUND SIGNAL RH (-)
11	G	MICROPHONE SIGNAL (-)
12	SB	VOICE GUIDANCE SIGNAL (-)
14	R	AV COMM (L)
15	P	AV COMM (L)
16	W	ACC
20	P	SOUND SIGNAL LH (+)
20	R	SOUND SIGNAL RH (+)
31	Y	MICROPHONE SIGNAL (+)
32	V	VOICE GUIDANCE SIGNAL (+)

15	G	-
16	W	-

33	SHIELD	SHIELD
34	G	AV COMM (R)
35	L	AV COMM (R)
40	V	ROOF STATUS SIGNAL (AUDIO)

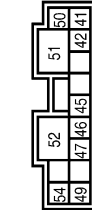
# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

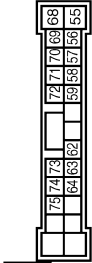
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SGA16FER-SJA2



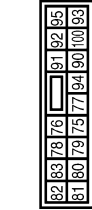
Terminal No.	Color of Wire	Signal Name [Specification]
41	B	SOUND SIGNAL DOOR WOOFER LH (+)
42	W	SOUND SIGNAL DOOR WOOFER LH (-)
45	G	SOUND SIGNAL DOOR WOOFER RH (+)
46	R	SOUND SIGNAL DOOR WOOFER RH (-)
47	B	GND
49	P	SOUND SIGNAL WOOFER REAR LH (-)
50	Y	BATTERY
51	GR	BATTERY
52	B	GND
54	L	SOUND SIGNAL WOOFER REAR LH (+)

Connector No.	B43
Connector Name	BOSE AMP.
Connector Type	SCA16FER-SGA4



Terminal No.	Color of Wire	Signal Name [Specification]
55	O	SOUND SIGNAL WOOFER REAR RH (-)
56	W	SOUND SIGNAL FR RH HEADREST LH (+)
57	O	SOUND SIGNAL CENTER (+)
58	P	SOUND SIGNAL CENTER (-)
59	L	SOUND SIGNAL FRONT LH (+)
62	V	SOUND SIGNAL FRONT RH (+)
63	G	SOUND SIGNAL FR LH HEADREST LH (+)
64	W	SOUND SIGNAL FR LH HEADREST RH (+)
68	LG	SOUND SIGNAL WOOFER REAR RH (+)
69	B	SOUND SIGNAL FR RH HEADREST LH (-)
70	G	SOUND SIGNAL FR RH HEADREST RH (-)

Connector No.	B58
Connector Name	WIRE TO WIRE
Connector Type	MS16FER-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	G	
76	Y	
77	SHIELD	
78	W	
79	B	
80	SHIELD	
81	Y	
82	G	
83	SHIELD	

Connector No.	B76
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	O	
4	P	
5	L	
6	SHIELD	
7	B	
8	W	
10	SHIELD	
11	B	
12	W	
13	R	
14	SHIELD	

71	Y	SOUND SIGNAL FR RH HEADREST RH (+)
72	W	SOUND SIGNAL FRONT LH (-)
73	LG	SOUND SIGNAL FRONT RH (-)
74	Y	SOUND SIGNAL FR LH HEADREST LH (-)
75	B	SOUND SIGNAL FR LH HEADREST RH (-)

Connector No.	B45
Connector Name	REAR WOOFER LH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	P	

15	G	
16	Y	

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH08MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	W	
3	B	
4	SHIELD	

JCNWA2441GB

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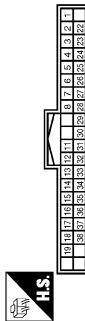
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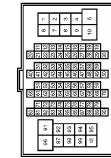
[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B32
Connector Name	RETRACTABLE HARD TOP CONTROL UNIT
Connector Type	TH10PW-NH



Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80PW-CS16-TM4



Connector No.	B209
Connector Name	WIRE TO WIRE
Connector Type	HS16FER-GS

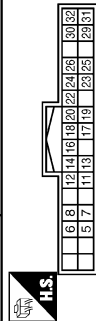


Terminal No.	Color of Wire	Signal Name [Specification]
33	V	ROOF STATUS SIGNAL (AUDIO)

Terminal No.	Color of Wire	Signal Name [Specification]
57	G	-
58	R	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	V	-
65	SB	-
66	Y	-
92	P	- [With BOSE system]
97	L	- [With BOSE system]

Terminal No.	Color of Wire	Signal Name [Specification]
75	W	-
76	B	-
77	SHIELD	-
78	Y	-
79	G	-
80	SHIELD	-

Connector No.	B241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH12PW-NH



Connector No.	B246
Connector Name	WIRE TO WIRE
Connector Type	TH16PW-NH



15	C
16	Y

Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (R)
19	R	AV COMM (L)
20	G	AV COMM (R)

Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

JCNWA2442GB

# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B247
Connector Name	REAR WOOFER RH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	B249
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	B309
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	Y	-
4	SHIELD	-

Connector No.	B311
Connector Name	REAR VIEW CAMERA
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	CAMERA ON SIGNAL
2	W	GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	B601
Connector Name	WIRE TO WIRE
Connector Type	NS16MBF-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B609
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B610
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B613
Connector Name	WIRE TO WIRE
Connector Type	A06MW



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
78	R	-
79	G	-
81	B	-
82	W	-

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BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B614
Connector Name	WIRE TO WIRE
Connector Type	A09FW



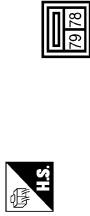
Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-
78	-	-
79	-	-
81	-	-
82	-	-

Connector No.	B615
Connector Name	DRIVER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B616
Connector Name	DRIVER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B617
Connector Name	MICROPHONE
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
81	-	-
82	-	-

Connector No.	B621
Connector Name	WIRE TO WIRE
Connector Type	NS16MFR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B620
Connector Name	WIRE TO WIRE
Connector Type	TK02MGY



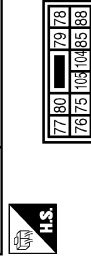
Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-

Connector No.	B630
Connector Name	WIRE TO WIRE
Connector Type	TK02MMV



Terminal No.	Color of Wire	Signal Name [Specification]
78	R	-
79	G	-



Connector No.	B631
Connector Name	WIRE TO WIRE
Connector Type	NS10MHP-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-



**BOSE AUDIO WITH NAVIGATION SYSTEM**

Connector No.	B637
Connector Name	PASSENGER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B636
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B635
Connector Name	WIRE TO WIRE
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B632
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	D11
Connector Name	DOOR WOOFER LH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	D2
Connector Name	TWEETER LH
Connector Type	TK02MBR-P



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-CS15

Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	W	-
12	L	-

Connector No.	B638
Connector Name	PASSENGER SEAT SPEAKER RH
Connector Type	TK02FW

Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

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< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	D16
Connector Name	DOOR SQUAWKER LH
Connector Type	TKQ2EBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	W	

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	
8	G	
11	W	
12	L	

Connector No.	D32
Connector Name	TWEETER RH
Connector Type	TKQ2MBR-P



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	W	

Connector No.	D41
Connector Name	DOOR WOOFER RH
Connector Type	NSI2EY-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	
2	R	

Connector No.	D46
Connector Name	DOOR SQUAWKER RH
Connector Type	TKQ2FBR



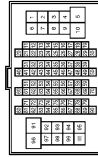
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	W	

Connector No.	E5
Connector Name	16P 5A WITH LIGHT POWER DISTRIBUTION MODULE (BUGE ROOM)
Connector Type	TH20FW-CS12-M4-TV



Terminal No.	Color of Wire	Signal Name [Specification]
25	G	

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	
69	W	
89	O	

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH (WITH A-T)
Connector Type	TBD1FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	

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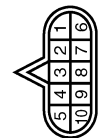
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[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



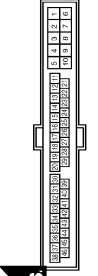
Terminal No.	7	Color of Wire	R	Signal Name [Specification]	
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Connector No.	F56
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02FB



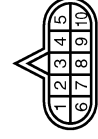
Terminal No.	1	Color of Wire	R	Signal Name [Specification]	
Terminal No.	2	Color of Wire	O	Signal Name [Specification]	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK36FW-NS10



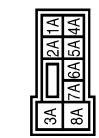
Terminal No.	30	Color of Wire	R	Signal Name [Specification]	
Terminal No.	31	Color of Wire	R	Signal Name [Specification]	
Terminal No.	41	Color of Wire	O	Signal Name [Specification]	

Connector No.	F157
Connector Name	TGM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG



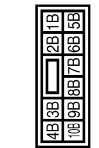
Terminal No.	7	Color of Wire	L	Signal Name [Specification]	REV LAMP RLY
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Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS06FW-M2



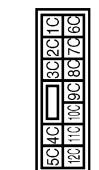
Terminal No.	2A	Color of Wire	G	Signal Name [Specification]	
Terminal No.	5A	Color of Wire	L	Signal Name [Specification]	

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS



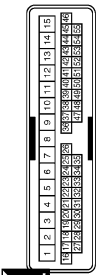
Terminal No.	1B	Color of Wire	R	Signal Name [Specification]	- [With NAVI]
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Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	12C	Color of Wire	R	Signal Name [Specification]	
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Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	7	Color of Wire	W	Signal Name [Specification]	
Terminal No.	8	Color of Wire	B	Signal Name [Specification]	
Terminal No.	11	Color of Wire	W	Signal Name [Specification]	
Terminal No.	12	Color of Wire	L	Signal Name [Specification]	

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[BOSE AUDIO WITH NAVIGATION]

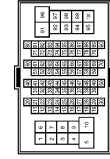
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
69	G	-
88	O	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
43	SHIELD	-
44	Y	-
45	BR	-
46	V	- [With NAVI]
49	R	- [With BOSE system]

50	G	- [With BOSE system]
57	O	-
61	O	-



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-



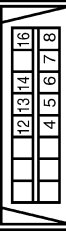
Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FW

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



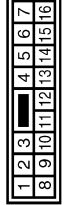
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	SB	-
5	Y	-
6	LG	-
7	B	-
11	L	-
12	P	-
13	R	- [With NAVI]
14	R	-

15	G	-
16	W	-

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[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M23
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH



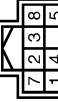
Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



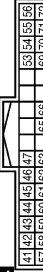
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	LG	-

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (6-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH02FW-NH



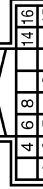
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M69
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	AGC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

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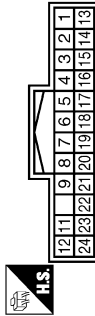
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[BOSE AUDIO WITH NAVIGATION]

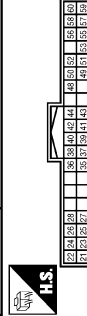
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	LG	ACC
4	B	SHIELD
5	R	AUX IMAGE GND
6	B	RGB (GGREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
10	L	COMM (CONT-)DISP
11	L	COMM (CONT-)DISP
12	W	CAMERA IMAGE SIGNAL

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH40FW-NH

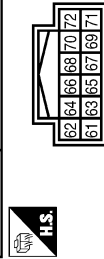


Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
32	G	IGNITION
36	SB	PARKING BRAKE
37	O	REVERSE

13	B	GND
14	SHIELD	SHIELD
15	G	AUX IMAGE SIGNAL
17	W	RGB (R-RED) SIGNAL
18	R	RGB (B-BLUE) SIGNAL
19	C	RGB SYNC
20	W	HP
21	SHIELD	SHIELD
22	P	COMM (DISP->CONT)
23	SHIELD	SHIELD

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	SOUND SIGNAL LH (+)
3	L	SOUND SIGNAL LH (-)
4	BR	VOICE GUIDANCE SIGNAL (+)
5	Y	VOICE GUIDANCE SIGNAL (-)
6	P	STRG SW A
7	GR	ACC
9	L	ILLUMINATION
10	B	SHIELD
11	R	SOUND SIGNAL RH (+)
12	G	SOUND SIGNAL RH (-)
15	B	STRG SW GND

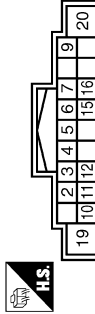
Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
61	W	RGB (R-RED) SIGNAL
62	B	RGB (GGREEN) SIGNAL
63	R	RGB (B-BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA (YS) SIGNAL
68	R	HP
69	W	VP
70	L	COMM (CONT->DISP)
71	P	COMM (DISP->CONT)

16	L	STRG SW B
19	Y	BATTERY

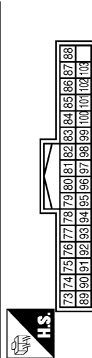
Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-CSZ



72	SHIELD	SHIELD
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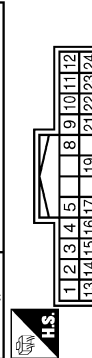
BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH22FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
79	R	iPod SOUND SIGNAL LH (+)
80	B	iPod SOUND SIGNAL RH (+)
81	SHIELD	SHIELD
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	W	AUX SOUND SIGNAL LH (+)
88	B	AUX SOUND SIGNAL GND
95	W	iPod SOUND SIGNAL LH (-)
96	G	iPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	R	AUX SOUND SIGNAL RH (+)

Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod ADAPTER->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTITY
12	W	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

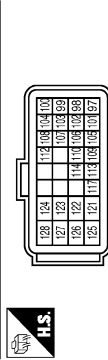
Connector No.	M108
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	- [With NAVI]
2	G	- [With NAVI]
3	SHIELD	- [With NAVI]

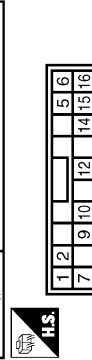
14	G	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	R	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (-)

Connector No.	M107
Connector Name	ECM
Connector Type	PH24FGY-R2S-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

Connector No.	M112
Connector Name	iPod SIDE (WITH A/T)
Connector Type	IP16FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTITY

JCNWA2451GB

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AV

# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M114	P	-
Connector Name	WIRE TO WIRE		
Connector Type	TH12FW-NH		



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	O	-
4	SHIELD	-
5	W	-
6	B	-
7	R	-
8	BR	-
9	W	-
10	W	-
11	SHIELD	-

Connector No.	M122		
Connector Name	BCM (BODY CONTROL MODULE)		
Connector Type	TH40FB-NH		



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

Terminal No.	12	P	-
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Connector No.	M116		
Connector Name	WIRE TO WIRE		
Connector Type	TK38MW-NS/D		



Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

Connector No.	M154		
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)		
Connector Type	JA08FW		



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M117		
Connector Name	WIRE TO WIRE		
Connector Type	TH80MW-CS/6-TM4		



Terminal No.	Color of Wire	Signal Name [Specification]
57	V	-
58	LG	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	P	-
65	SB	-
66	Y	-
92	P	-
97	L	-

Connector No.	M155		
Connector Name	WIRE TO WIRE		
Connector Type	TH08FW-NH		



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R	-
4	W	-
5	B	-
6	SHIELD	-
7	G	-
8	R	-

# DISPLAY UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M181
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	G	
3	O	
4	SHIELD	
5	W	
6	B	
7	R	
8	BR	
9	W	
10	L	
11	SHIELD	

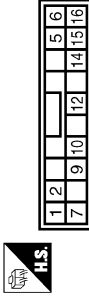
Connector No.	M381
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	SHIELD	
6	SHIELD	
7	G	
8	R	

12	P	-
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Connector No.	M182
Connector Name	iPod SIDE (WITH M/T)
Connector Type	IP116FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	L	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT13SHF-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
106	-	AM-FM MAIN
107	-	ANTENNA AMP_ON SIGNAL

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	-	
15	-	
17	-	

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FMRA JACK



















Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SATELLITE ANTENNA
109	-	SHIELD

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**BOSE AUDIO WITH NAVIGATION SYSTEM**

<table border="1"> <tr><td>Connector No.</td><td>M373</td></tr> <tr><td>Connector Name</td><td>AV CONTROL UNIT (WITH NAVI)</td></tr> <tr><td>Connector Type</td><td>GTBS-1PP-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>110</td><td>111</td></tr> <tr><td>Color of Wire</td><td>--</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>GPS ANTENNA</td><td>SHIELD</td></tr> </table>	Connector No.	M373	Connector Name	AV CONTROL UNIT (WITH NAVI)	Connector Type	GTBS-1PP-HU	Terminal No.	110	111	Color of Wire	--	--	Signal Name [Specification]	GPS ANTENNA	SHIELD	<table border="1"> <tr><td>Connector No.</td><td>M374</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>FAKRA</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>--</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td><td>--</td></tr> </table>	Connector No.	M374	Connector Name	WIRE TO WIRE	Connector Type	FAKRA	Terminal No.	1	2	Color of Wire	--	--	Signal Name [Specification]	--	--	<table border="1"> <tr><td>Connector No.</td><td>M375</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SSN-1/1PP-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>--</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td><td>--</td></tr> </table>	Connector No.	M375	Connector Name	WIRE TO WIRE	Connector Type	GT13SSN-1/1PP-HU	Terminal No.	1	2	Color of Wire	--	--	Signal Name [Specification]	--	--	<table border="1"> <tr><td>Connector No.</td><td>M376</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SS-1/1S-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>--</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td><td>--</td></tr> </table>	Connector No.	M376	Connector Name	WIRE TO WIRE	Connector Type	GT13SS-1/1S-HU	Terminal No.	1	2	Color of Wire	--	--	Signal Name [Specification]	--	--
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Connector No.	M377																																																														
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Color of Wire	--	--																																																													
Signal Name [Specification]	ANTENNA AMP. ON SIGNAL	AM-FM MAIN																																																													

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**BOSE AUDIO WITH NAVIGATION SYSTEM**

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
3	--	SATELLITE ANTENNA
4	--	SHIELD

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NSB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-- [WB NAVI]
2	G	-- [WB NAVI]
3	SHIELD	--

Connector No.	R7
Connector Name	MICROPHONE
Connector Type	TK6AFW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	MICROPHONE SIGNAL [WB NAVI]
2	SHIELD	MICROPHONE GND
4	W	MICROPHONE VCC [WB NAVI]

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# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

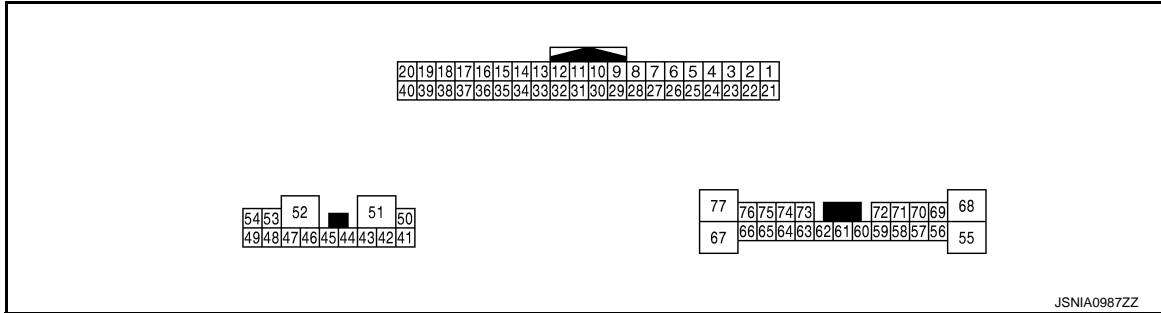
[BOSE AUDIO WITH NAVIGATION]

## BOSE AMP.

### Reference Value

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### TERMINAL LAYOUT



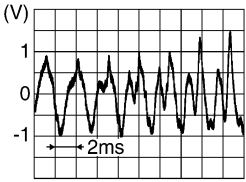
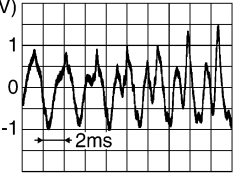
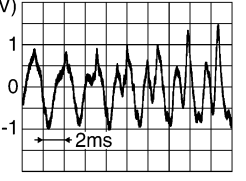
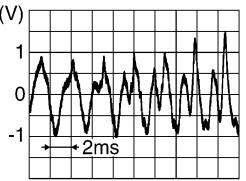
### PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
14 (R)	—	AV communication signal (L)	Input/ Output	—	—	—
15 (P)	—	AV communication signal (L)	Input/ Output	—	—	—
16 (W)	Ground	ACC power supply	Input	Ignition switch ACC	—	12.0 V
29 (P)	9 (L)	Sound signal LH	Input	Ignition switch ON	Sound output	<p>SKIB3609E</p>
30 (R)	10 (G)	Sound signal RH	Input	Ignition switch ON	Sound output	<p>SKIB3609E</p>
31 (Y)	11 (G)	Microphone signal (for AudioPilot®)	Input	Ignition switch ON	When inputting noise.	<p>(reference value) PKIA2104E</p>

# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
32 (V)	12 (SB)	Voice guidance signal	Input	Ignition switch ON	When inputting voice guid- ance.	 <small>SKIB3609E</small>
33	—	Shield	—	—	—	—
34 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
35 (L)	—	AV communication signal (H)	Input/ Output	—	—	—
40 (V)	Ground	Roof status signal (audio)	Input	Ignition switch ON	Retractable hard top is fully closed.	13.0 V
					Other than above.	0 V
41 (B)	42 (W)	Sound signal door woofer LH	Output	Ignition switch ON	Sound output	 <small>SKIB3609E</small>
45 (G)	46 (R)	Sound signal door woofer RH	Output	Ignition switch ON	Sound output	 <small>SKIB3609E</small>
47 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
50 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
51 (GR)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
52 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
54 (L)	49 (P)	Sound signal rear woofer LH	Output	Ignition switch ON	Sound output	 <small>SKIB3609E</small>

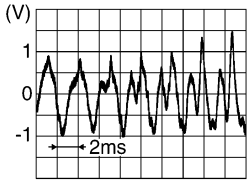
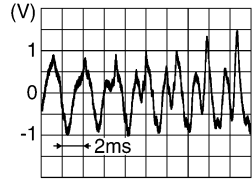
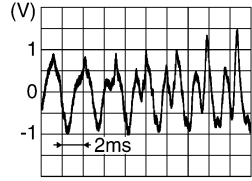
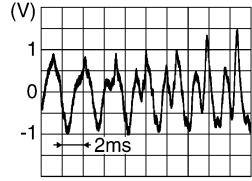
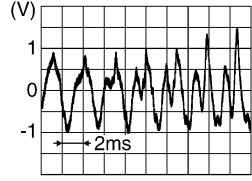
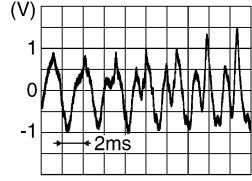
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AV

# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

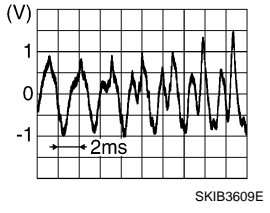
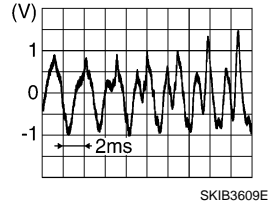
[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
56 (W)	69 (B)	Sound signal front RH headrest LH	Output	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
57 (O)	58 (P)	Sound signal center speak- er	Output	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
59 (P)	72 (W)	Sound signal front LH	Input	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
62 (V)	73 (LG)	Sound signal front RH	Input	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
63 (G)	74 (Y)	Sound signal front LH headrest LH	Input	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>
64 (W)	75 (B)	Sound signal front LH headrest RH	Input	Ignition switch ON	Sound output	 <p style="text-align: right; font-size: small;">SKIB3609E</p>

# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
68 (LG)	55 (O)	Sound signal rear woofer RH	Output	Ignition switch ON	Sound output	
71 (Y)	70 (G)	Sound signal front RH headrest RH	Input	Ignition switch ON	Sound output	

Wiring Diagram - BOSE AUDIO WITH NAVIGATION SYSTEM -

INFOID:000000004928940

**NOTE:**

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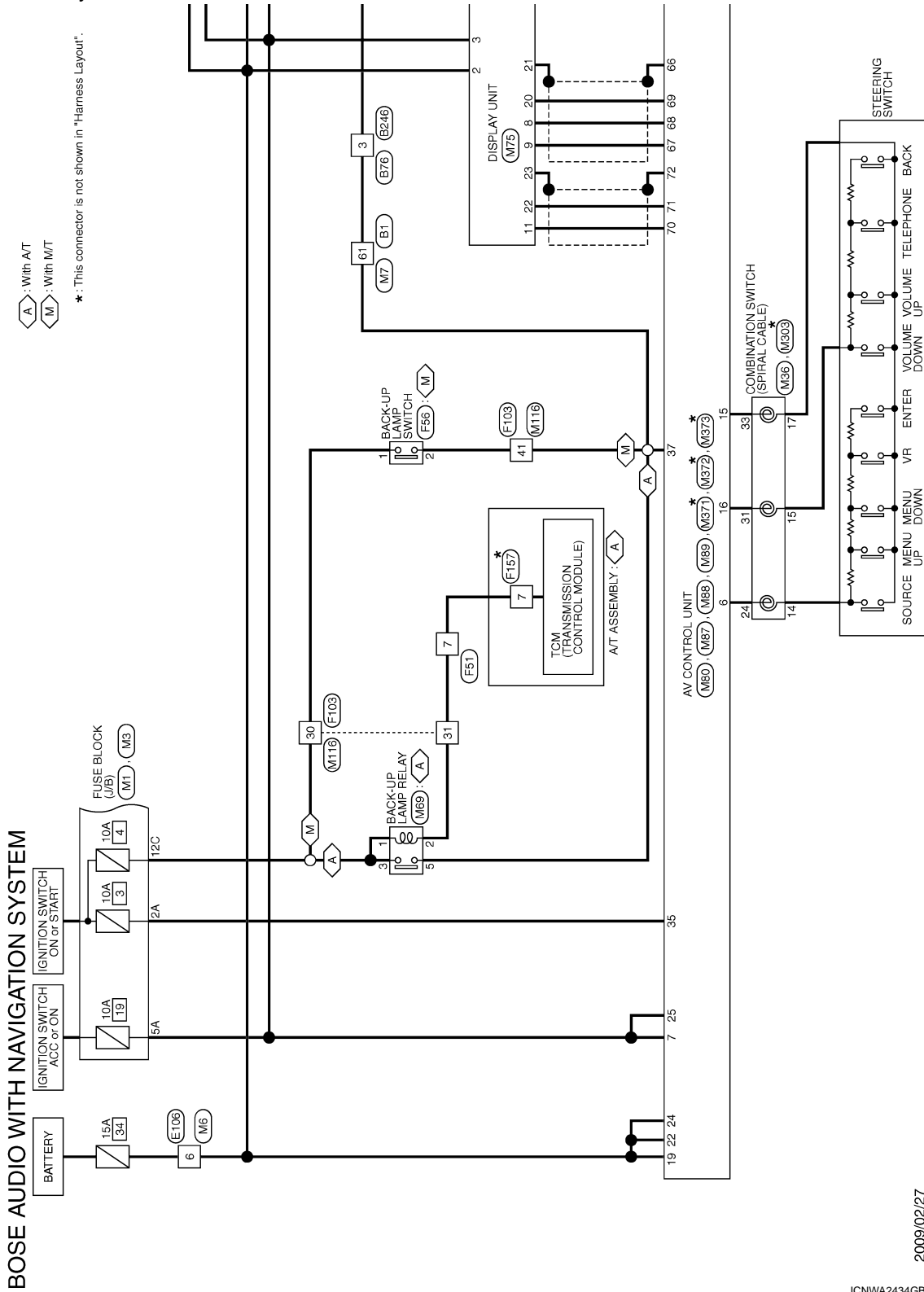
AV

# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.



2009/02/27

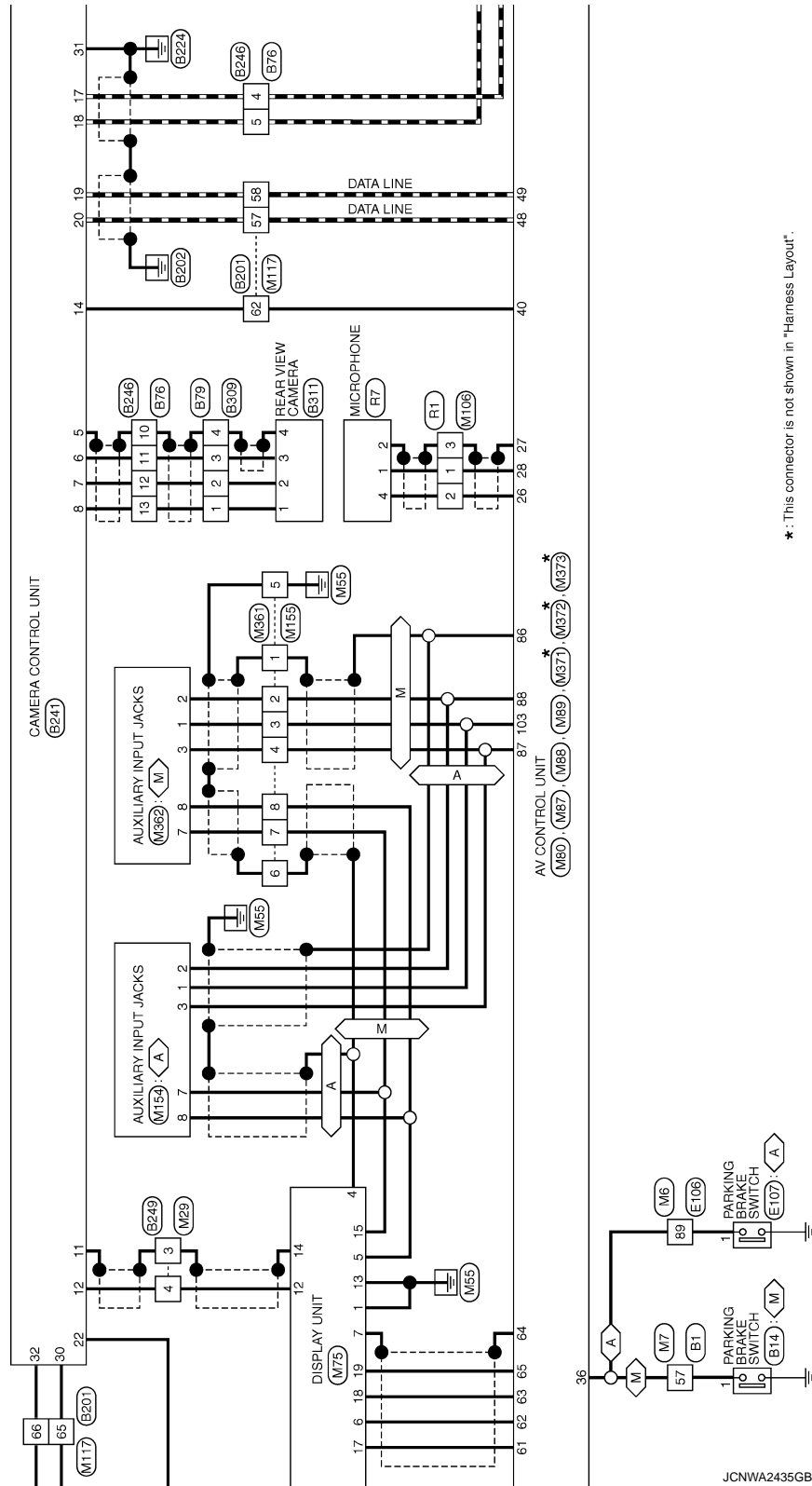
JCNWA2434GB

# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

⬠ A : With AVT  
⬠ M : With MFT



\*: This connector is not shown in "Harness Layout".

JCNWA2435GB

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

AV

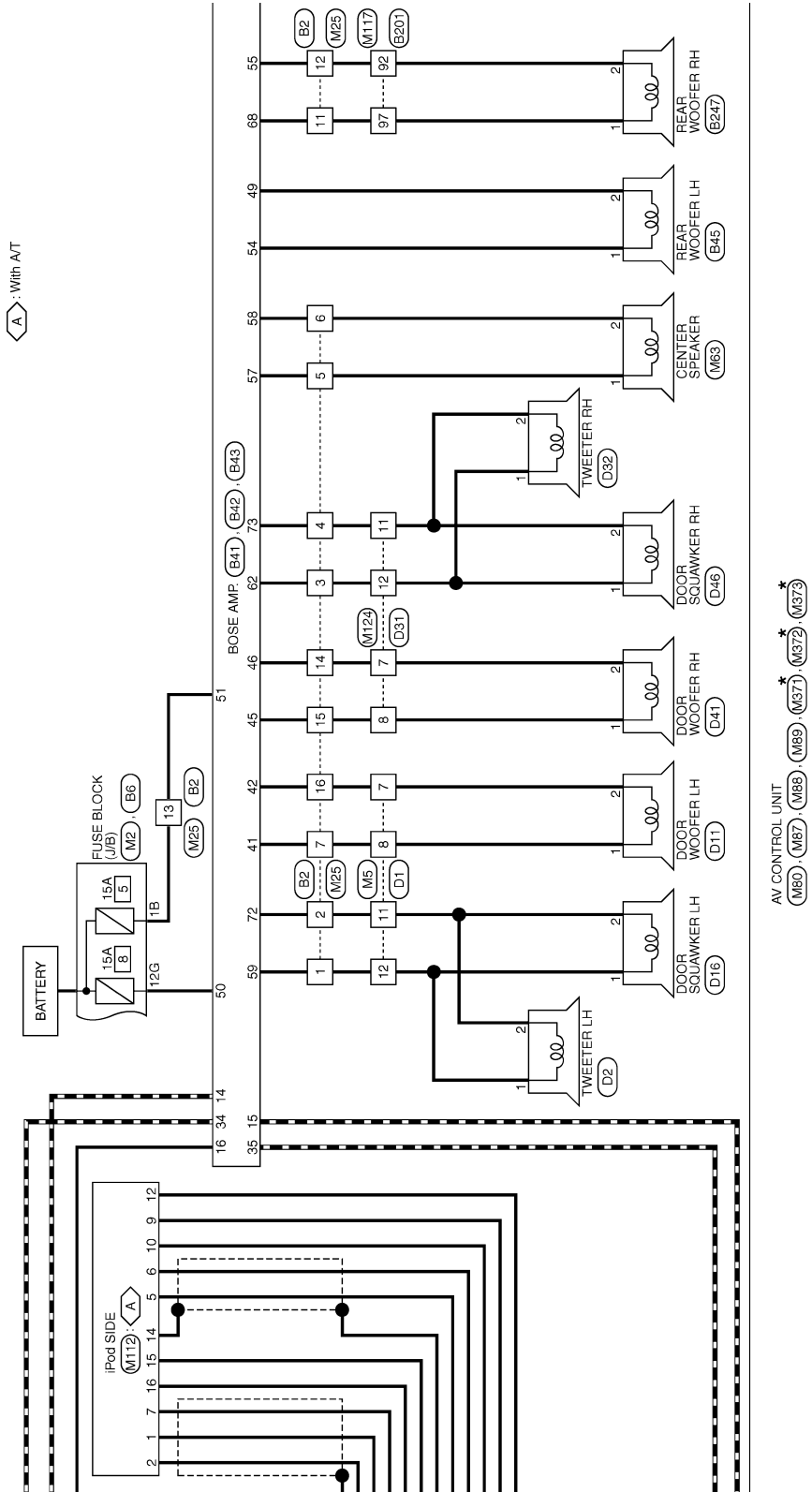




# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



\* : This connector is not shown in "Harness Layout".

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

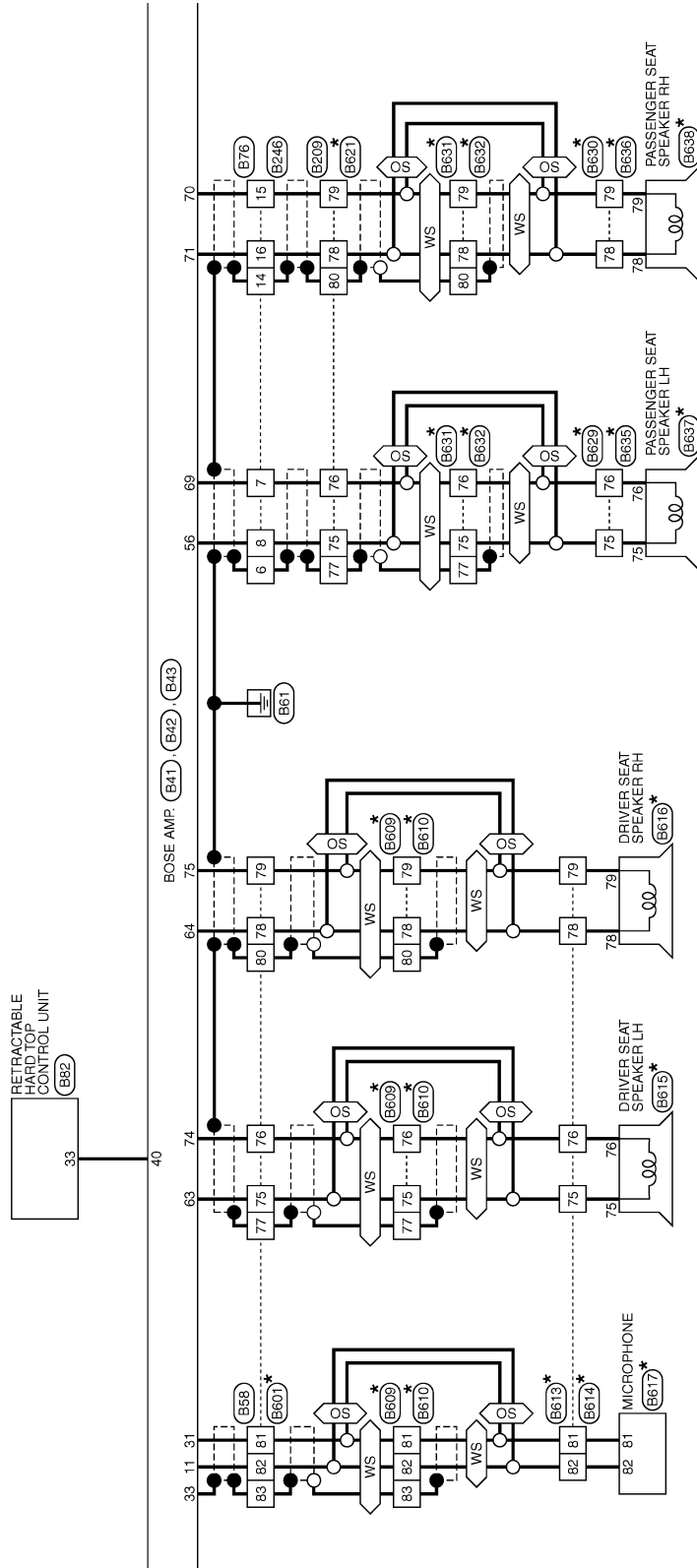
JCNWA2437GB

# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

WS : With climate controlled seat  
 OS : Without climate controlled seat

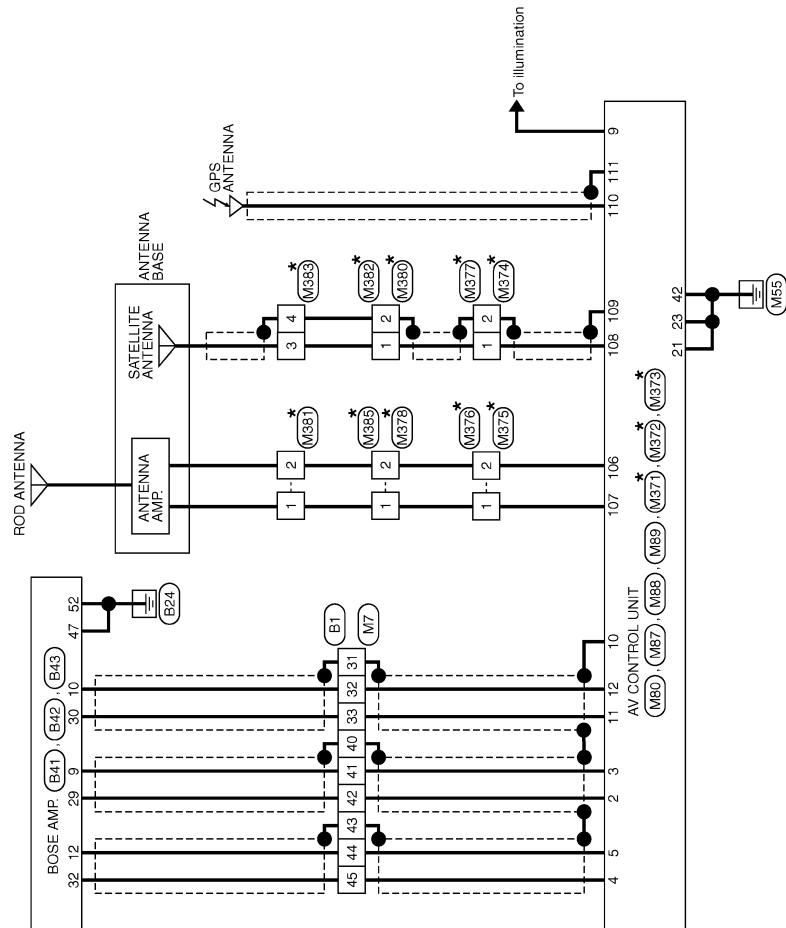


AV CONTROL UNIT  
 (M80) (M87) (M88) (M89) (M37) (M372) (M373)

\*: This connector is not shown in "Harness Layout".

JCNWA2438GB

# BOSE AMP.



\*: This connector is not shown in "Harness Layout".

JCNWA2439GB

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

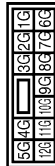
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
43	SHIELD	-
44	SB	-
45	V	-
46	W	-
48	R	- [With BOSE system]



Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12BFR-CS



Terminal No.	12G	Y	-
--------------	-----	---	---

50	G	- [With BOSE system]
57	V	-
61	O	-



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-

Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	PD1FB-A



Terminal No.	1	V	-
--------------	---	---	---

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	TH4DFW-NH



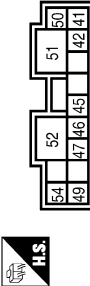
Terminal No.	Color of Wire	Signal Name [Specification]
9	L	SOUND SIGNAL LH (-)
10	G	SOUND SIGNAL RH (-)
11	G	MICROPHONE SIGNAL (-)
12	SB	VOICE GUIDANCE SIGNAL (-)
14	R	AV COMM (L)
15	P	AV COMM (L)
16	W	ACC
20	P	SOUND SIGNAL LH (+)
29	R	SOUND SIGNAL RH (+)
31	Y	MICROPHONE SIGNAL (+)
32	V	VOICE GUIDANCE SIGNAL (+)

15	G	-
16	W	-

33	SHIELD	-
34	G	AV COMM (R)
35	L	AV COMM (R)
40	V	ROOF STATUS SIGNAL (AUDIO)

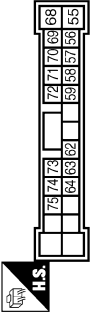
BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SGA16FER-SJA2



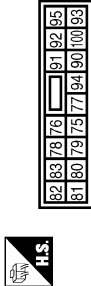
Terminal No.	Color of Wire	Signal Name [Specification]
41	B	SOUND SIGNAL DOOR WOOFER LH (+)
42	W	SOUND SIGNAL DOOR WOOFER LH (-)
45	G	SOUND SIGNAL DOOR WOOFER RH (+)
46	R	SOUND SIGNAL DOOR WOOFER RH (-)
47	B	GND
49	P	SOUND SIGNAL WOOFER REAR LH (-)
50	Y	BATTERY
51	GR	BATTERY
52	B	GND
54	L	SOUND SIGNAL WOOFER REAR LH (+)

Connector No.	B43
Connector Name	BOSE AMP.
Connector Type	SCA16FER-SGA4



Terminal No.	Color of Wire	Signal Name [Specification]
55	O	SOUND SIGNAL WOOFER REAR RH (-)
56	W	SOUND SIGNAL FR RH HEADREST LH (+)
57	O	SOUND SIGNAL CENTER (+)
58	P	SOUND SIGNAL CENTER (-)
59	L	SOUND SIGNAL FRONT LH (+)
62	V	SOUND SIGNAL FRONT RH (+)
63	G	SOUND SIGNAL FR LH HEADREST LH (+)
64	W	SOUND SIGNAL FR LH HEADREST RH (+)
68	LG	SOUND SIGNAL WOOFER REAR RH (+)
69	B	SOUND SIGNAL FR RH HEADREST LH (-)
70	G	SOUND SIGNAL FR RH HEADREST RH (-)

Connector No.	B58
Connector Name	WIRE TO WIRE
Connector Type	MS16FER-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	G	
76	Y	
77	SHIELD	
78	W	
79	B	
80	SHIELD	
81	Y	
82	G	
83	SHIELD	

Connector No.	B76
Connector Name	WIRE TO WIRE
Connector Type	TH18MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	O	
4	P	
5	L	
6	SHIELD	
7	B	
8	W	
10	SHIELD	
11	B	
12	W	
13	R	
14	SHIELD	

71	Y	SOUND SIGNAL FR RH HEADREST RH (+)
72	W	SOUND SIGNAL FRONT LH (-)
73	LG	SOUND SIGNAL FRONT RH (-)
74	Y	SOUND SIGNAL FR LH HEADREST LH (-)
75	B	SOUND SIGNAL FR LH HEADREST RH (-)

Connector No.	B45
Connector Name	REAR WOOFER LH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	P	

15	G	
16	Y	

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH08MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	W	
3	B	
4	SHIELD	

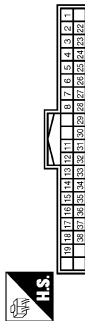
JCNWA2441GB

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

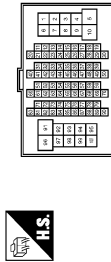


BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B32
Connector Name	RETRACTABLE HARD TOP CONTROL UNIT
Connector Type	TH10PW-NH



Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80PW-CS16-TM4



Connector No.	B209
Connector Name	WIRE TO WIRE
Connector Type	HS16FER-GS

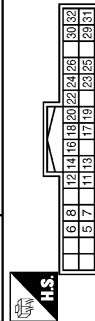


Terminal No.	Color of Wire	Signal Name [Specification]
33	V	ROOF STATUS SIGNAL (AUDIO)

Terminal No.	Color of Wire	Signal Name [Specification]
57	G	-
58	R	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	V	-
65	SB	-
66	Y	-
92	P	- [With BOSE system]
97	L	- [With BOSE system]

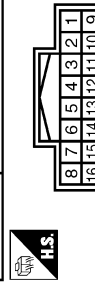
Terminal No.	Color of Wire	Signal Name [Specification]
75	W	-
76	B	-
77	SHIELD	-
78	Y	-
79	G	-
80	SHIELD	-

Connector No.	B241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH12PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	O	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (8-PULSE)
30	SB	ACC
31	B	GND
32	Y	BATTERY

Connector No.	B246
Connector Name	WIRE TO WIRE
Connector Type	TH16PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (R)
19	R	AV COMM (L)
20	G	AV COMM (R)

Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

15	C
16	Y

JCNWA2442GB

BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B247
Connector Name	REAR WOOFER RH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	B249
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	B309
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	Y	-
4	SHIELD	-

Connector No.	B311
Connector Name	REAR VIEW CAMERA
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	CAMERA ON SIGNAL
2	W	GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	B601
Connector Name	WIRE TO WIRE
Connector Type	NS16MBF-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B609
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B610
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B613
Connector Name	WIRE TO WIRE
Connector Type	A06MW



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
78	R	-
79	G	-
81	B	-
82	W	-

BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B617
Connector Name	MICROPHONE
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
81	-	-
82	-	-

Connector No.	B616
Connector Name	DRIVER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B615
Connector Name	DRIVER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B614
Connector Name	WIRE TO WIRE
Connector Type	A06FW



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-
78	-	-
79	-	-
81	-	-
82	-	-

Connector No.	B631
Connector Name	WIRE TO WIRE
Connector Type	NS10MBP-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B630
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



Terminal No.	Color of Wire	Signal Name [Specification]
78	R	-
79	G	-

Connector No.	B629
Connector Name	WIRE TO WIRE
Connector Type	TK02MGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-

Connector No.	B621
Connector Name	WIRE TO WIRE
Connector Type	NS16MBP-CS





Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

JCNWA2444GB





BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B637
Connector Name	PASSENGER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B636
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B635
Connector Name	WIRE TO WIRE
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B632
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	D11
Connector Name	DOOR WOOFER LH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	D2
Connector Name	TWEETER LH
Connector Type	TK02MBR-P



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH02FW-CS15

Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	W	-
12	L	-

Connector No.	B638
Connector Name	PASSENGER SEAT SPEAKER RH
Connector Type	TK02FW

Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

A  
B  
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D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P




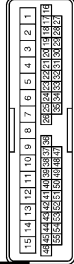







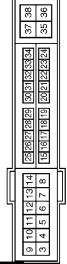

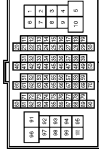


JCNWA2445GB

# BOSE AMP.

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

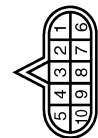
## BOSE AUDIO WITH NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>D16</td></tr> <tr><td>Connector Name</td><td>DOOR SQUAWKER LH</td></tr> <tr><td>Connector Type</td><td>TKQ2EBR</td></tr> </table>  	Connector No.	D16	Connector Name	DOOR SQUAWKER LH	Connector Type	TKQ2EBR	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	Signal Name [Specification]	-	-						
Connector No.	D16																					
Connector Name	DOOR SQUAWKER LH																					
Connector Type	TKQ2EBR																					
Terminal No.	1	2																				
Color of Wire	L	W																				
Signal Name [Specification]	-	-																				
<table border="1"> <tr><td>Connector No.</td><td>D31</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40FW-CS15</td></tr> </table>  	Connector No.	D31	Connector Name	WIRE TO WIRE	Connector Type	TH40FW-CS15	<table border="1"> <tr><td>Terminal No.</td><td>7</td><td>8</td><td>11</td><td>12</td></tr> <tr><td>Color of Wire</td><td>R</td><td>G</td><td>W</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	7	8	11	12	Color of Wire	R	G	W	L	Signal Name [Specification]	-	-	-	-
Connector No.	D31																					
Connector Name	WIRE TO WIRE																					
Connector Type	TH40FW-CS15																					
Terminal No.	7	8	11	12																		
Color of Wire	R	G	W	L																		
Signal Name [Specification]	-	-	-	-																		
<table border="1"> <tr><td>Connector No.</td><td>D32</td></tr> <tr><td>Connector Name</td><td>TWEETER RH</td></tr> <tr><td>Connector Type</td><td>TKQ2MBR-P</td></tr> </table>  	Connector No.	D32	Connector Name	TWEETER RH	Connector Type	TKQ2MBR-P	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	Signal Name [Specification]	-	-						
Connector No.	D32																					
Connector Name	TWEETER RH																					
Connector Type	TKQ2MBR-P																					
Terminal No.	1	2																				
Color of Wire	L	W																				
Signal Name [Specification]	-	-																				
<table border="1"> <tr><td>Connector No.</td><td>D41</td></tr> <tr><td>Connector Name</td><td>DOOR WOOFER RH</td></tr> <tr><td>Connector Type</td><td>NSI2FW-CS</td></tr> </table>  	Connector No.	D41	Connector Name	DOOR WOOFER RH	Connector Type	NSI2FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>G</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	1	2	Color of Wire	G	R	Signal Name [Specification]	-	-						
Connector No.	D41																					
Connector Name	DOOR WOOFER RH																					
Connector Type	NSI2FW-CS																					
Terminal No.	1	2																				
Color of Wire	G	R																				
Signal Name [Specification]	-	-																				
<table border="1"> <tr><td>Connector No.</td><td>D46</td></tr> <tr><td>Connector Name</td><td>DOOR SQUAWKER RH</td></tr> <tr><td>Connector Type</td><td>TKQ2FBR</td></tr> </table>  	Connector No.	D46	Connector Name	DOOR SQUAWKER RH	Connector Type	TKQ2FBR	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	Signal Name [Specification]	-	-						
Connector No.	D46																					
Connector Name	DOOR SQUAWKER RH																					
Connector Type	TKQ2FBR																					
Terminal No.	1	2																				
Color of Wire	L	W																				
Signal Name [Specification]	-	-																				
<table border="1"> <tr><td>Connector No.</td><td>E5</td></tr> <tr><td>Connector Name</td><td>16 PIN WITH LIGHT POWER DISTRIBUTION MODULE (BUGE ROOM)</td></tr> <tr><td>Connector Type</td><td>TH20FW-CS12-M4-TV</td></tr> </table>  	Connector No.	E5	Connector Name	16 PIN WITH LIGHT POWER DISTRIBUTION MODULE (BUGE ROOM)	Connector Type	TH20FW-CS12-M4-TV	<table border="1"> <tr><td>Terminal No.</td><td>25</td></tr> <tr><td>Color of Wire</td><td>G</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Terminal No.	25	Color of Wire	G	Signal Name [Specification]	-									
Connector No.	E5																					
Connector Name	16 PIN WITH LIGHT POWER DISTRIBUTION MODULE (BUGE ROOM)																					
Connector Type	TH20FW-CS12-M4-TV																					
Terminal No.	25																					
Color of Wire	G																					
Signal Name [Specification]	-																					
<table border="1"> <tr><td>Connector No.</td><td>E106</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40FW-CS16-TM4</td></tr> </table>  	Connector No.	E106	Connector Name	WIRE TO WIRE	Connector Type	TH40FW-CS16-TM4	<table border="1"> <tr><td>Terminal No.</td><td>6</td><td>69</td><td>89</td></tr> <tr><td>Color of Wire</td><td>Y</td><td>W</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	6	69	89	Color of Wire	Y	W	O	Signal Name [Specification]	-	-	-			
Connector No.	E106																					
Connector Name	WIRE TO WIRE																					
Connector Type	TH40FW-CS16-TM4																					
Terminal No.	6	69	89																			
Color of Wire	Y	W	O																			
Signal Name [Specification]	-	-	-																			
<table border="1"> <tr><td>Connector No.</td><td>E107</td></tr> <tr><td>Connector Name</td><td>PARKING BRAKE SWITCH (WITH A-T)</td></tr> <tr><td>Connector Type</td><td>TBD1FW</td></tr> </table>  	Connector No.	E107	Connector Name	PARKING BRAKE SWITCH (WITH A-T)	Connector Type	TBD1FW	<table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Terminal No.	1	Color of Wire	O	Signal Name [Specification]	-									
Connector No.	E107																					
Connector Name	PARKING BRAKE SWITCH (WITH A-T)																					
Connector Type	TBD1FW																					
Terminal No.	1																					
Color of Wire	O																					
Signal Name [Specification]	-																					

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BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



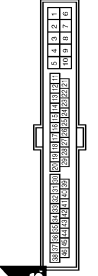
Terminal No.	7	R	Signal Name [Specification]

Connector No.	F56
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02FB



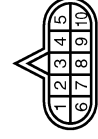
Terminal No.	1	R	Signal Name [Specification]
	2	O	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10



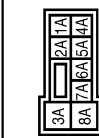
Terminal No.	30	R	Signal Name [Specification]
	31	R	
	41	O	

Connector No.	F157
Connector Name	TGM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG



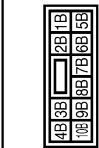
Terminal No.	7	L	Signal Name [Specification]
			REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS08FW-MZ



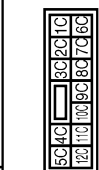
Color of Wire	Signal Name [Specification]
2A	G
5A	L

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS



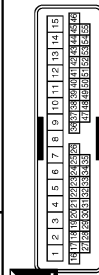
Terminal No.	1B	R	Signal Name [Specification]
			- [With NAVI]

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	12C	R	Signal Name [Specification]
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Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	7	W	Signal Name [Specification]
	8	B	
	11	W	
	12	L	

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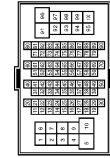
# BOSE AMP.

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[BOSE AUDIO WITH NAVIGATION]

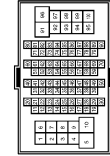
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
69	G	-
88	O	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
43	SHIELD	-
44	Y	-
45	BR	-
46	V	- [With NAVI]
49	R	- [With BOSE system]

50	G	- [With BOSE system]
57	O	-
61	O	-



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



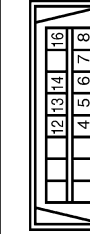
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



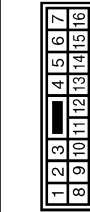
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	SB	-
5	Y	-
6	LG	-
7	B	-
11	L	-
12	P	-
13	R	- [With NAVI]
14	R	-

15	G	-
16	W	-

BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M29
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH



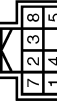
Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



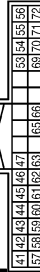
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	LG	-

Connector No.	M68
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (6-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH02FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M89
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	AGC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

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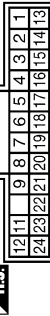
# BOSE AMP.

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[BOSE AUDIO WITH NAVIGATION]

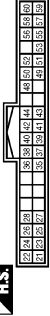
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	LG	ACC
4	B	SHIELD
5	R	AUX IMAGE GND
6	B	RGB (GGREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
10	L	COMM (CONT-)DISP
11	L	COMM (CONT-)DISP
12	W	CAMERA IMAGE SIGNAL

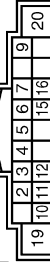
Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
32	G	IGNITION
36	SB	PARKING BRAKE
37	O	REVERSE

13	B	GND
14	SHIELD	SHIELD
15	G	AUX IMAGE SIGNAL
17	W	RGB (R-RED) SIGNAL
18	R	RGB (B-BLUE) SIGNAL
19	C	RGB SYNC
20	W	HP
21	SHIELD	SHIELD
22	P	COMM (DISP->CONT)
23	SHIELD	SHIELD

Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-CSZ



Terminal No.	Color of Wire	Signal Name [Specification]
2	P	SOUND SIGNAL LH (+)
3	L	SOUND SIGNAL LH (-)
4	BR	VOICE GUIDANCE SIGNAL (+)
5	Y	VOICE GUIDANCE SIGNAL (-)
6	P	STRG SW A
7	GR	ACC
9	L	ILLUMINATION
10	B	SHIELD
11	R	SOUND SIGNAL RH (+)
12	G	SOUND SIGNAL RH (-)
15	B	STRG SW GND

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12FW-NH



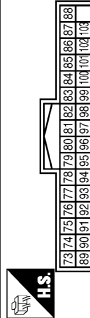
Terminal No.	Color of Wire	Signal Name [Specification]
61	W	RGB (R-RED) SIGNAL
62	B	RGB (GGREEN) SIGNAL
63	R	RGB (B-BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA (YS) SIGNAL
68	R	HP
69	W	HP
70	L	COMM (CONT->DISP)
71	P	COMM (DISP->CONT)

72	SHIELD	SHIELD
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16	L	STRG SW B
19	Y	BATTERY

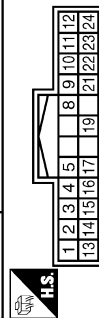
BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH22FW-NH



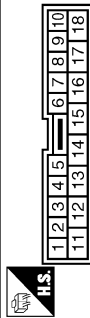
Terminal No.	Color of Wire	Signal Name [Specification]
79	R	iPod SOUND SIGNAL LH (+)
80	B	iPod SOUND SIGNAL RH (+)
81	SHIELD	SHIELD
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	W	AUX SOUND SIGNAL LH (+)
88	B	AUX SOUND SIGNAL GND
95	W	iPod SOUND SIGNAL LH (-)
96	G	iPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	R	AUX SOUND SIGNAL RH (+)

Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod ADAPTER->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTITY
12	W	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

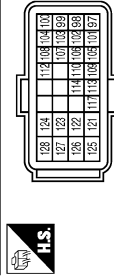
Connector No.	M108
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	- [With NAVI]
2	G	- [With NAVI]
3	SHIELD	- [With NAVI]

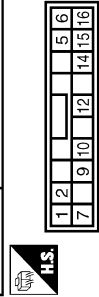
14	G	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	R	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (-)

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-R2S-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

Connector No.	M112
Connector Name	iPod SIDE (WITH A/T)
Connector Type	IP16FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTITY

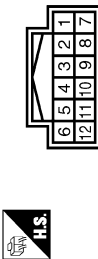
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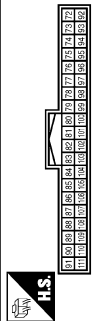
BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M114				
Connector Name	WIRE TO WIRE				
Connector Type	TH12FW-NH				



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	O	-
4	SHIELD	-
5	W	-
6	B	-
7	R	-
8	BR	-
9	W	-
10	W	-
11	SHIELD	-

Connector No.	M122				
Connector Name	BCM (BODY CONTROL MODULE)				
Connector Type	TH40FB-NH				



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

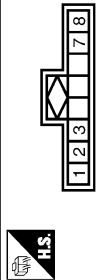
Terminal No.	12	P	-
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Connector No.	M116				
Connector Name	WIRE TO WIRE				
Connector Type	TK38MW-NS/D				



Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

Connector No.	M154				
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)				
Connector Type	JA08FW				



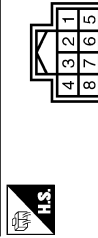
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M117				
Connector Name	WIRE TO WIRE				
Connector Type	TH80MW-CS/6-TM4				



Terminal No.	Color of Wire	Signal Name [Specification]
57	V	-
58	LG	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	P	-
65	SB	-
66	Y	-
92	P	-
97	L	-

Connector No.	M155				
Connector Name	WIRE TO WIRE				
Connector Type	TH08FW-NH				



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R	-
4	W	-
5	B	-
6	SHIELD	-
7	G	-
8	R	-



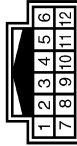
# BOSE AMP.

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[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

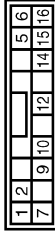
Connector No.	M181
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	G	
3	O	
4	SHIELD	
5	W	
6	B	
7	BR	
8	BR	
9	W	
10	L	
11	SHIELD	

12	P	-
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Connector No.	M182
Connector Name	iPod SIDE (WITH M/T)
Connector Type	IP116FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	L	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	-	
15	-	
17	-	

Connector No.	M381
Connector Name	WIRE TO WIRE
Connector Type	TH08MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	SHIELD	
6	SHIELD	
7	G	
8	R	

Connector No.	M382
Connector Name	AUXILIARY INPUT JACKS (WITH M/T)
Connector Type	A08FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT13SHF-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
106	-	AM-FM MAIN
107	-	ANTENNA AMP_ON SIGNAL

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FAKRA JACK



















Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SATELLITE ANTENNA
109	-	SHIELD

JCNWA2453GB

A  
B  
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J  
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P

BOSE AUDIO WITH NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>M373</td></tr> <tr><td>Connector Name</td><td>AV CONTROL UNIT (WITH NAVI)</td></tr> <tr><td>Connector Type</td><td>GTBS-I/PP-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>110</td><td>111</td></tr> <tr><td>Color of Wire</td><td>--</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>GPS ANTENNA</td><td>SHIELD</td></tr> </table>	Connector No.	M373	Connector Name	AV CONTROL UNIT (WITH NAVI)	Connector Type	GTBS-I/PP-HU	Terminal No.	110	111	Color of Wire	--	--	Signal Name [Specification]	GPS ANTENNA	SHIELD	<table border="1"> <tr><td>Connector No.</td><td>M374</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>FAKRA</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>--</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td><td>--</td></tr> </table>	Connector No.	M374	Connector Name	WIRE TO WIRE	Connector Type	FAKRA	Terminal No.	1	2	Color of Wire	--	--	Signal Name [Specification]	--	--	<table border="1"> <tr><td>Connector No.</td><td>M375</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SSN-1/IPP-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>--</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td><td>--</td></tr> </table>	Connector No.	M375	Connector Name	WIRE TO WIRE	Connector Type	GT13SSN-1/IPP-HU	Terminal No.	1	2	Color of Wire	--	--	Signal Name [Specification]	--	--	<table border="1"> <tr><td>Connector No.</td><td>M376</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SS-1/IS-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>--</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td><td>--</td></tr> </table>	Connector No.	M376	Connector Name	WIRE TO WIRE	Connector Type	GT13SS-1/IS-HU	Terminal No.	1	2	Color of Wire	--	--	Signal Name [Specification]	--	--
Connector No.	M373																																																														
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Connector No.	M377																																																														
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Color of Wire	--	--																																																													
Signal Name [Specification]	ANTENNA AMP. ON SIGNAL	AM-FM MAIN																																																													

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BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
3	--	SATELLITE ANTENNA
4	--	SHIELD

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NSB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-- [WB NAVI]
2	G	-- [WB NAVI]
3	SHIELD	--

Connector No.	R7
Connector Name	MICROPHONE
Connector Type	TK6AFW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	MICROPHONE SIGNAL [WB NAVI]
2	SHIELD	MICROPHONE GND
4	W	MICROPHONE VCC [WB NAVI]

A  
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F  
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K  
L  
M  
AV  
O  
P

# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

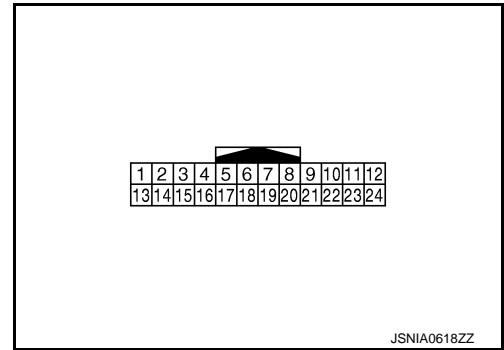
[BOSE AUDIO WITH NAVIGATION]

## IPOD ADAPTER

Reference Value

INFOID:000000004371861

TERMINAL LAYOUT



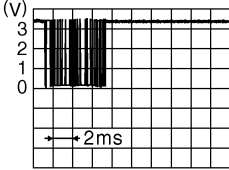
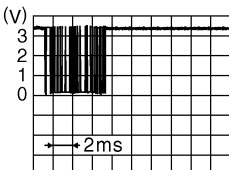
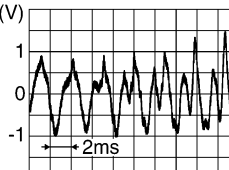
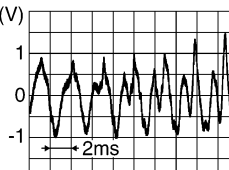
PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
1 (R)	13 (W)	iPod sound signal LH	Output	Ignition switch ON	When iPod mode is select- ed.	<p>SKIB3609E</p>
2 (B)	14 (G)	iPod sound signal RH	Output	Ignition switch ON	When iPod mode is select- ed.	<p>SKIB3609E</p>
3 (V)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
4 (R)	—	AV communication signal (L)	Input/ Output	—	—	—
5 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
8 (W)	Ground	iPod battery charge	Output	Ignition switch ON	Connected to iPod®.	12.0 V

# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
9 (P)	Ground	Communication signal (iPod adapter→iPod®)	Output	Ignition switch ON	The wave pattern is displayed just after iPod connection.	<p><b>NOTE:</b> After the wave pattern display, the value continues Approx 3.3 V</p>  <p>JPNIA0462GB</p>
10 (L)	Ground	Communication signal (iPod®→iPod adapter)	Input	Ignition switch ON	Connected to iPod®.	 <p>JPNIA0462GB</p>
11 (O)	Ground	ACCESSORY IDENTIFY	—	Ignition switch ON	Connected to iPod®.	0 V
12 (W)	14 (G)	iPod sound signal RH	Input	Ignition switch ON	When iPod mode is selected.	 <p>SKIB3609E</p>
15	—	Shield	—	—	—	—
16 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
17 (BR)	Ground	Ground	—	Ignition switch ON	—	0 V
19	—	Shield	—	—	—	—
21 (W)	Ground	iPod connection recognition signal	Input	Ignition switch ON	Not connected to iPod®.	4.0 V
				Ignition switch ON	Connected to iPod®.	0 V
22 (G)	Ground	ACCESSORY DETECT	—	Ignition switch ON	Connected to iPod®.	0 V
23 (R)	Ground	iPod sound signal ground	—	Ignition switch ON	—	0 V
24 (B)	13 (W)	iPod sound signal LH	Input	Ignition switch ON	When iPod mode is selected.	 <p>SKIB3609E</p>

A  
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AV

# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

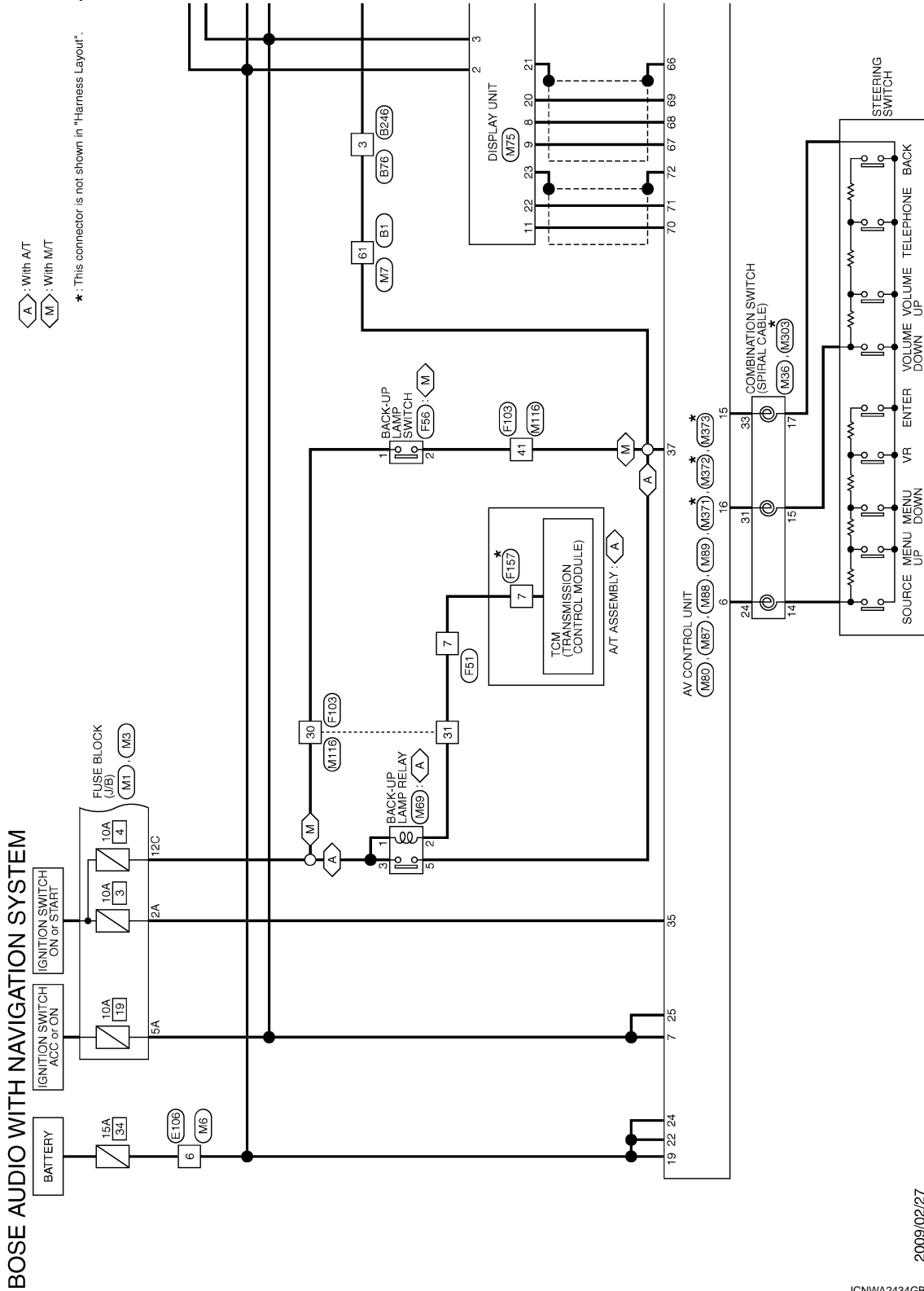
[BOSE AUDIO WITH NAVIGATION]

## Wiring Diagram - BOSE AUDIO WITH NAVIGATION SYSTEM -

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**NOTE:**

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.

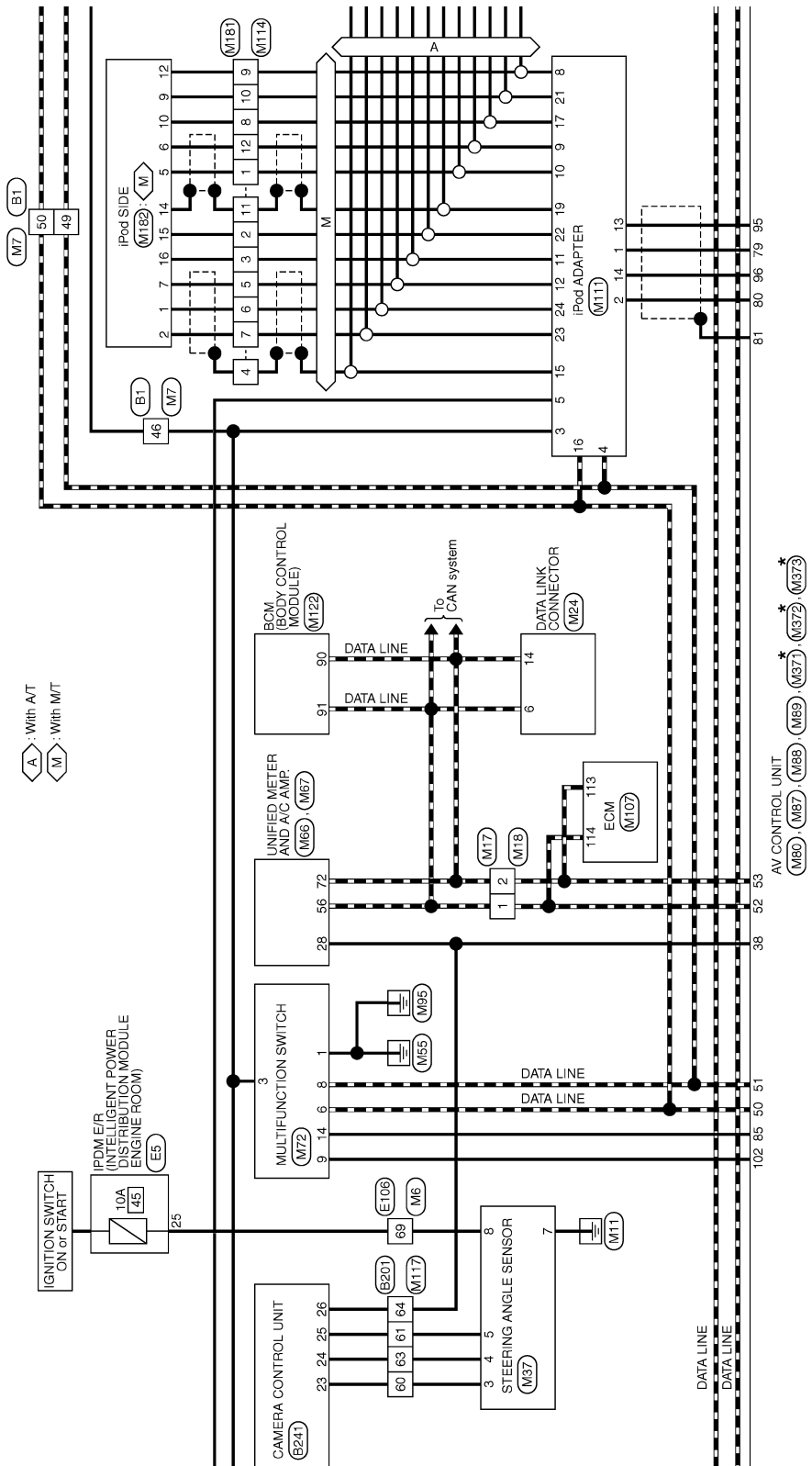




# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



\*: This connector is not shown in "Harness Layout".

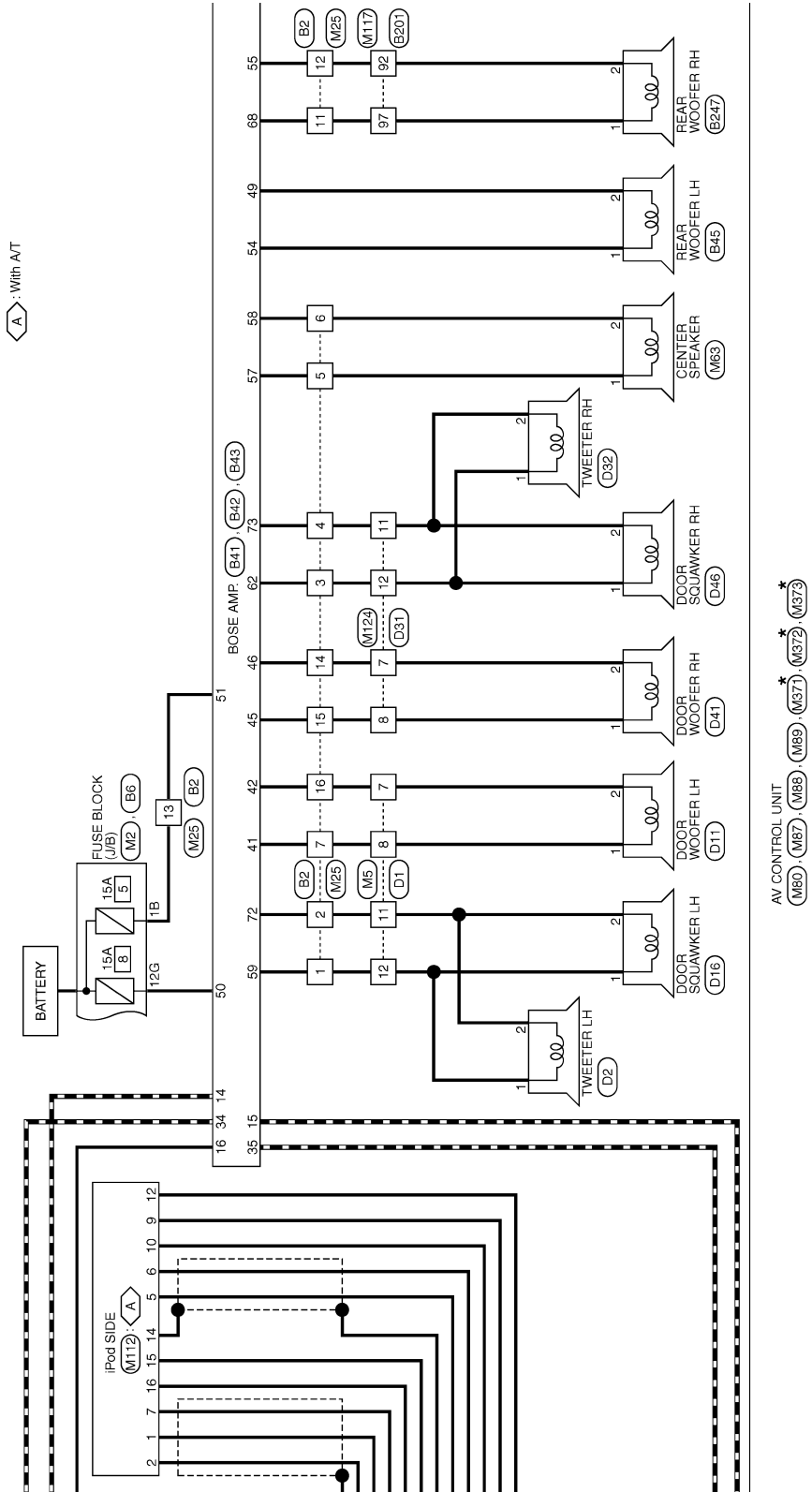
JCNWA2436GB



# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



\*: This connector is not shown in "Harness Layout".

A  
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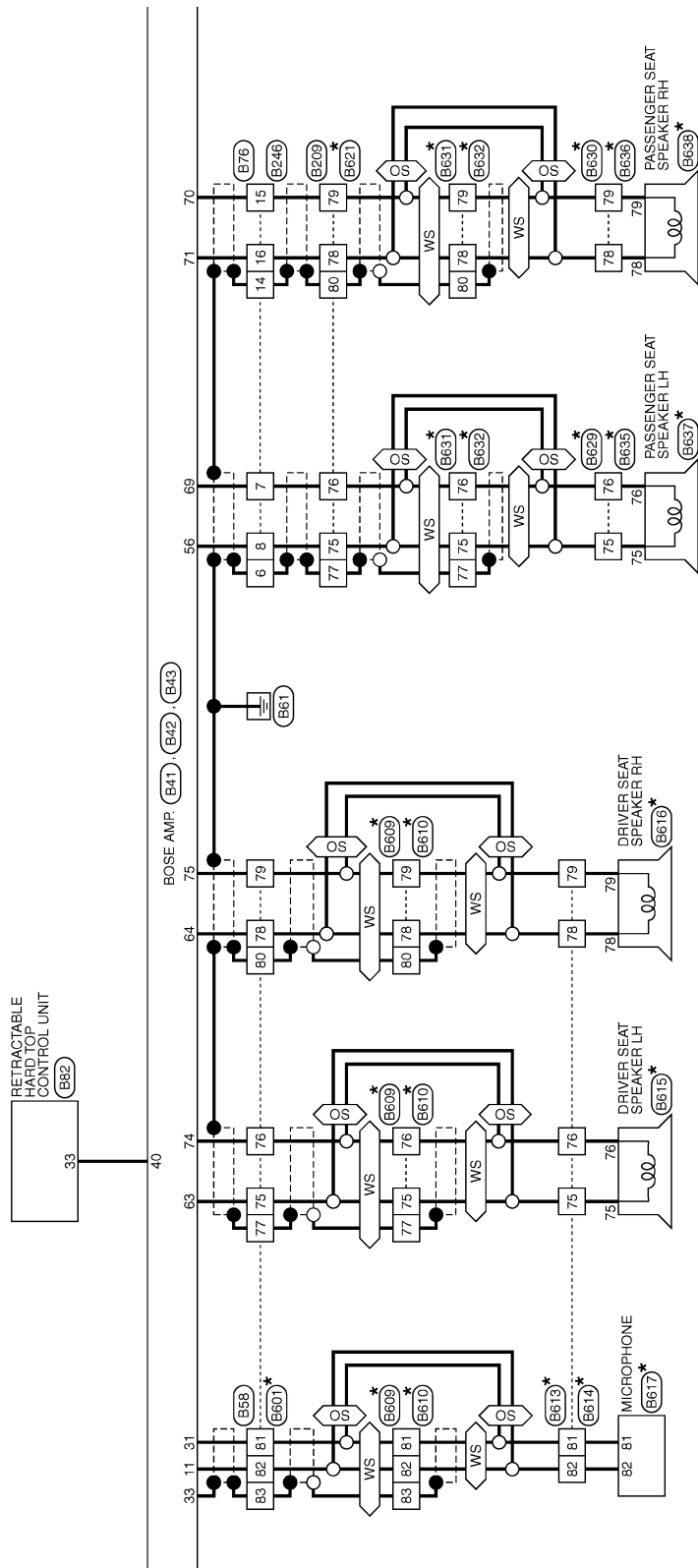
JCNWA2437GB

# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

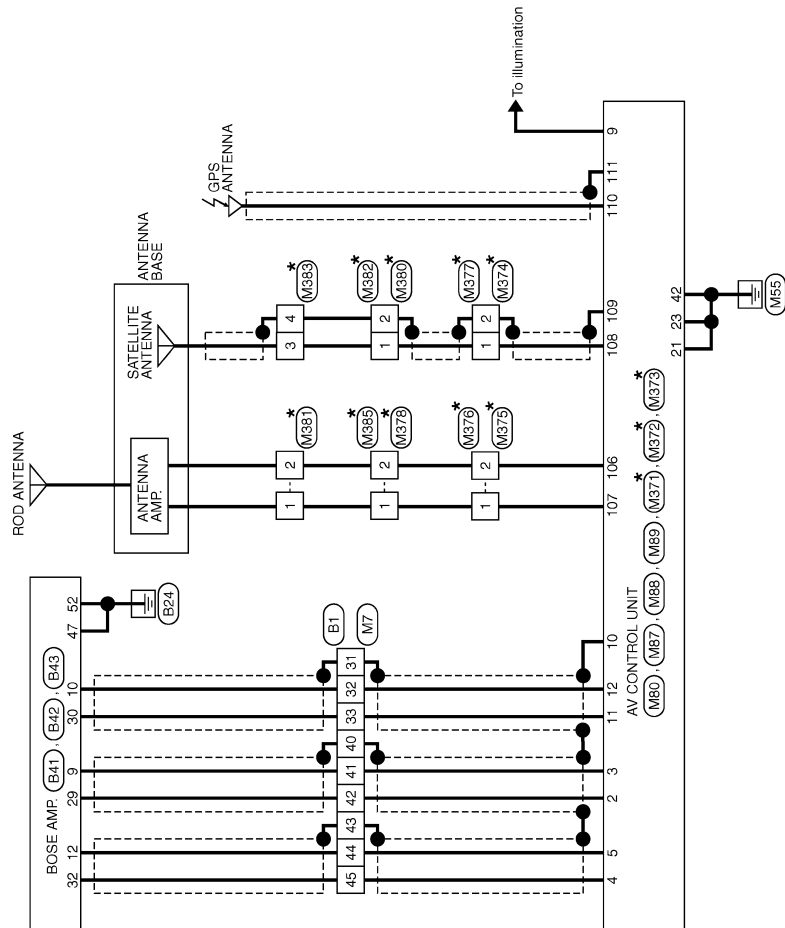
WS: With climate controlled seat  
 OS: Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

JCNWA2438GB

# IPOD ADAPTER



\* : This connector is not shown in "Harness Layout".

JCNWA2439GB

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AV

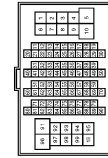
# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

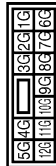
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
43	SHIELD	-
44	SB	-
45	V	-
46	W	-
48	R	- [With BOSE system]



Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS12BBS-CS



Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	PD1FB-A



Terminal No.	1	Color of Wire	V	Signal Name [Specification]	-
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Terminal No.	50	Color of Wire	G	Signal Name [Specification]	- [With BOSE system]
Terminal No.	57	Color of Wire	V	Signal Name [Specification]	-
Terminal No.	61	Color of Wire	O	Signal Name [Specification]	-



Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	MS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-

Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	TH4DFW-NH



Terminal No.	33	Color of Wire	SHIELD	Signal Name [Specification]	SHIELD
Terminal No.	34	Color of Wire	G	Signal Name [Specification]	AV COMM (R)
Terminal No.	35	Color of Wire	L	Signal Name [Specification]	AV COMM (L)
Terminal No.	40	Color of Wire	V	Signal Name [Specification]	ROOF STATUS SIGNAL (AUDIO)

Terminal No.	Color of Wire	Signal Name [Specification]
9	L	SOUND SIGNAL LH (-)
10	G	SOUND SIGNAL RH (-)
11	G	MICROPHONE SIGNAL (-)
12	SB	VOICE GUIDANCE SIGNAL (-)
14	R	AV COMM (L)
15	P	AV COMM (L)
16	W	ACC
20	P	SOUND SIGNAL LH (+)
29	R	SOUND SIGNAL RH (+)
31	Y	MICROPHONE SIGNAL (+)
32	V	VOICE GUIDANCE SIGNAL (+)

JCNWA2440GB

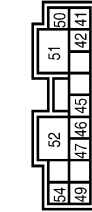
# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

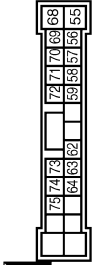
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SGA16FER-SJA2



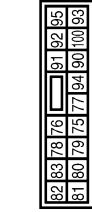
Terminal No.	Color of Wire	Signal Name [Specification]
41	B	SOUND SIGNAL DOOR WOOFER LH (+)
42	W	SOUND SIGNAL DOOR WOOFER LH (-)
45	G	SOUND SIGNAL DOOR WOOFER RH (+)
46	R	SOUND SIGNAL DOOR WOOFER RH (-)
47	B	GND
49	P	SOUND SIGNAL WOOFER REAR LH (-)
50	Y	BATTERY
51	GR	BATTERY
52	B	GND
54	L	SOUND SIGNAL WOOFER REAR LH (+)

Connector No.	B43
Connector Name	BOSE AMP.
Connector Type	SCA16FER-SGA4



Terminal No.	Color of Wire	Signal Name [Specification]
55	O	SOUND SIGNAL WOOFER REAR RH (-)
56	W	SOUND SIGNAL FR RH HEADREST LH (+)
57	O	SOUND SIGNAL CENTER (+)
58	P	SOUND SIGNAL CENTER (-)
59	L	SOUND SIGNAL FRONT LH (+)
62	V	SOUND SIGNAL FRONT RH (+)
63	G	SOUND SIGNAL FR LH HEADREST LH (+)
64	W	SOUND SIGNAL FR LH HEADREST RH (+)
68	LG	SOUND SIGNAL WOOFER REAR RH (+)
69	B	SOUND SIGNAL FR RH HEADREST LH (-)
70	G	SOUND SIGNAL FR RH HEADREST RH (-)

Connector No.	B58
Connector Name	WIRE TO WIRE
Connector Type	MS16FER-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	G	
76	Y	
77	SHIELD	
78	W	
79	B	
80	SHIELD	
81	Y	
82	G	
83	SHIELD	

71	Y	SOUND SIGNAL FR RH HEADREST RH (+)
72	W	SOUND SIGNAL FRONT LH (-)
73	LG	SOUND SIGNAL FRONT RH (-)
74	Y	SOUND SIGNAL FR LH HEADREST LH (-)
75	B	SOUND SIGNAL FR LH HEADREST RH (-)

Connector No.	B45
Connector Name	REAR WOOFER LH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	P	

15	G	
16	Y	

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH08MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	
2	W	
3	B	
4	SHIELD	

JCNWA2441GB

A  
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AV

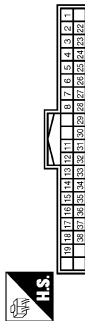
# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

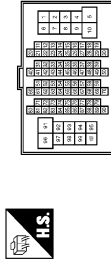
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B32
Connector Name	RETRACTABLE HARD TOP CONTROL UNIT
Connector Type	TH10PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
33	V	ROOF STATUS SIGNAL (AUDIO)

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80PW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
57	G	-
58	R	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	V	-
65	SB	-
66	Y	-
92	P	- [With BOSE system]
97	L	- [With BOSE system]

Connector No.	B209
Connector Name	WIRE TO WIRE
Connector Type	HS16FER-GS



Terminal No.	Color of Wire	Signal Name [Specification]
75	W	-
76	B	-
77	SHIELD	-
78	Y	-
79	G	-
80	SHIELD	-

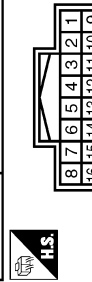
Connector No.	B241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH12PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (R)
19	R	AV COMM (L)
20	G	AV COMM (R)

22	GR	REVERSE
23	L	SENSOR SIGNAL 1
24	BR	SENSOR SIGNAL 2
25	O	SENSOR SIGNAL 3
26	V	VEHICLE SPEED (8-PULSE)
30	SB	ACC
31	B	GND
32	Y	BATTERY

Connector No.	B246
Connector Name	WIRE TO WIRE
Connector Type	TH16PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

15	C
16	Y

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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B247
Connector Name	REAR WOOFER RH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	B249
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	B309
Connector Name	WIRE TO WIRE
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	Y	-
4	SHIELD	-

Connector No.	B311
Connector Name	REAR VIEW CAMERA
Connector Type	TH04MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	CAMERA ON SIGNAL
2	W	GND
3	Y	CAMERA IMAGE SIGNAL
4	SHIELD	SHIELD

Connector No.	B601
Connector Name	WIRE TO WIRE
Connector Type	NS16MBF-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B609
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B610
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-
81	B	-
82	W	-
83	B/R	-

Connector No.	B613
Connector Name	WIRE TO WIRE
Connector Type	A06MW



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
78	R	-
79	G	-
81	B	-
82	W	-

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A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
P

AV

# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B614
Connector Name	WIRE TO WIRE
Connector Type	A09FW



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-
78	-	-
79	-	-
81	-	-
82	-	-

Connector No.	B615
Connector Name	DRIVER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B616
Connector Name	DRIVER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B617
Connector Name	MICROPHONE
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
81	-	-
82	-	-

Connector No.	B621
Connector Name	WIRE TO WIRE
Connector Type	NS16MFR-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B620
Connector Name	WIRE TO WIRE
Connector Type	TK02MGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-

Connector No.	B630
Connector Name	WIRE TO WIRE
Connector Type	TK02MMV



Terminal No.	Color of Wire	Signal Name [Specification]
78	R	-
79	G	-

Connector No.	B631
Connector Name	WIRE TO WIRE
Connector Type	NS10MHP-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

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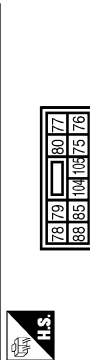
# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B632
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B635
Connector Name	WIRE TO WIRE
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B636
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B637
Connector Name	PASSENGER SEAT SPEAKER LH
Connector Type	TK02FGY



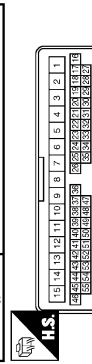
Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B638
Connector Name	PASSENGER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	W	-
12	L	-

Connector No.	D2
Connector Name	TWEETER LH
Connector Type	TK02MBR-P



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	D11
Connector Name	DOOR WOOFER LH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	R	-

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P




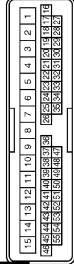







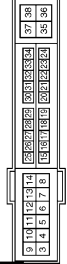

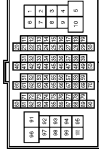


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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>D16</td></tr> <tr><td>Connector Name</td><td>DOOR SQUAWKER LH</td></tr> <tr><td>Connector Type</td><td>TKQ2EBR</td></tr> </table>  	Connector No.	D16	Connector Name	DOOR SQUAWKER LH	Connector Type	TKQ2EBR	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	Signal Name [Specification]	-	-						
Connector No.	D16																					
Connector Name	DOOR SQUAWKER LH																					
Connector Type	TKQ2EBR																					
Terminal No.	1	2																				
Color of Wire	L	W																				
Signal Name [Specification]	-	-																				
<table border="1"> <tr><td>Connector No.</td><td>D31</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40FW-CS15</td></tr> </table>  	Connector No.	D31	Connector Name	WIRE TO WIRE	Connector Type	TH40FW-CS15	<table border="1"> <tr><td>Terminal No.</td><td>7</td><td>8</td><td>11</td><td>12</td></tr> <tr><td>Color of Wire</td><td>R</td><td>G</td><td>W</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	7	8	11	12	Color of Wire	R	G	W	L	Signal Name [Specification]	-	-	-	-
Connector No.	D31																					
Connector Name	WIRE TO WIRE																					
Connector Type	TH40FW-CS15																					
Terminal No.	7	8	11	12																		
Color of Wire	R	G	W	L																		
Signal Name [Specification]	-	-	-	-																		
<table border="1"> <tr><td>Connector No.</td><td>D32</td></tr> <tr><td>Connector Name</td><td>TWEETER RH</td></tr> <tr><td>Connector Type</td><td>TKQ2MBR-P</td></tr> </table>  	Connector No.	D32	Connector Name	TWEETER RH	Connector Type	TKQ2MBR-P	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	Signal Name [Specification]	-	-						
Connector No.	D32																					
Connector Name	TWEETER RH																					
Connector Type	TKQ2MBR-P																					
Terminal No.	1	2																				
Color of Wire	L	W																				
Signal Name [Specification]	-	-																				
<table border="1"> <tr><td>Connector No.</td><td>D41</td></tr> <tr><td>Connector Name</td><td>DOOR WOOFER RH</td></tr> <tr><td>Connector Type</td><td>NSI2FW-CS</td></tr> </table>  	Connector No.	D41	Connector Name	DOOR WOOFER RH	Connector Type	NSI2FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>G</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	1	2	Color of Wire	G	R	Signal Name [Specification]	-	-						
Connector No.	D41																					
Connector Name	DOOR WOOFER RH																					
Connector Type	NSI2FW-CS																					
Terminal No.	1	2																				
Color of Wire	G	R																				
Signal Name [Specification]	-	-																				
<table border="1"> <tr><td>Connector No.</td><td>D46</td></tr> <tr><td>Connector Name</td><td>DOOR SQUAWKER RH</td></tr> <tr><td>Connector Type</td><td>TKQ2FBR</td></tr> </table>  	Connector No.	D46	Connector Name	DOOR SQUAWKER RH	Connector Type	TKQ2FBR	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	Signal Name [Specification]	-	-						
Connector No.	D46																					
Connector Name	DOOR SQUAWKER RH																					
Connector Type	TKQ2FBR																					
Terminal No.	1	2																				
Color of Wire	L	W																				
Signal Name [Specification]	-	-																				
<table border="1"> <tr><td>Connector No.</td><td>E5</td></tr> <tr><td>Connector Name</td><td>16 PIN WITH LIGHT POWER DISTRIBUTION MODULE (ENGINE ROOM)</td></tr> <tr><td>Connector Type</td><td>TH20FW-CS12-M4-TV</td></tr> </table>  	Connector No.	E5	Connector Name	16 PIN WITH LIGHT POWER DISTRIBUTION MODULE (ENGINE ROOM)	Connector Type	TH20FW-CS12-M4-TV	<table border="1"> <tr><td>Terminal No.</td><td>25</td></tr> <tr><td>Color of Wire</td><td>G</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Terminal No.	25	Color of Wire	G	Signal Name [Specification]	-									
Connector No.	E5																					
Connector Name	16 PIN WITH LIGHT POWER DISTRIBUTION MODULE (ENGINE ROOM)																					
Connector Type	TH20FW-CS12-M4-TV																					
Terminal No.	25																					
Color of Wire	G																					
Signal Name [Specification]	-																					
<table border="1"> <tr><td>Connector No.</td><td>E106</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40FW-CS16-TM4</td></tr> </table>  	Connector No.	E106	Connector Name	WIRE TO WIRE	Connector Type	TH40FW-CS16-TM4	<table border="1"> <tr><td>Terminal No.</td><td>6</td><td>69</td><td>89</td></tr> <tr><td>Color of Wire</td><td>Y</td><td>W</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	6	69	89	Color of Wire	Y	W	O	Signal Name [Specification]	-	-	-			
Connector No.	E106																					
Connector Name	WIRE TO WIRE																					
Connector Type	TH40FW-CS16-TM4																					
Terminal No.	6	69	89																			
Color of Wire	Y	W	O																			
Signal Name [Specification]	-	-	-																			
<table border="1"> <tr><td>Connector No.</td><td>E107</td></tr> <tr><td>Connector Name</td><td>PARKING BRAKE SWITCH (WITH A-T)</td></tr> <tr><td>Connector Type</td><td>TBD1FW</td></tr> </table>  	Connector No.	E107	Connector Name	PARKING BRAKE SWITCH (WITH A-T)	Connector Type	TBD1FW	<table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Terminal No.	1	Color of Wire	O	Signal Name [Specification]	-									
Connector No.	E107																					
Connector Name	PARKING BRAKE SWITCH (WITH A-T)																					
Connector Type	TBD1FW																					
Terminal No.	1																					
Color of Wire	O																					
Signal Name [Specification]	-																					

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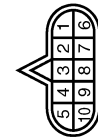
# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



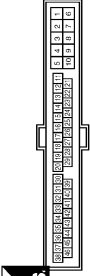
Terminal No.	7	R	
Color of Wire			Signal Name [Specification]

Connector No.	F56
Connector Name	BACK-UP LAMP SWITCH
Connector Type	RK02FB



Terminal No.	1	R	
Color of Wire			Signal Name [Specification]
	2	O	

Connector No.	F103
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10



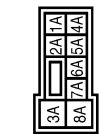
Terminal No.	30	R	
Color of Wire			Signal Name [Specification]
	31	R	
	41	O	

Connector No.	F157
Connector Name	TGM (TRANSMISSION CONTROL MODULE)
Connector Type	SP10FG



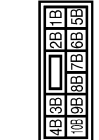
Terminal No.	7	L	
Color of Wire			Signal Name [Specification]
			REV LAMP RLY

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS08FW-M2



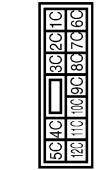
Terminal No.	2A	G	
Color of Wire			Signal Name [Specification]
	5A	L	

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS



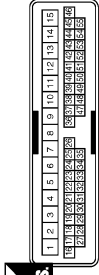
Terminal No.	1B	R	
Color of Wire			Signal Name [Specification]
			- [With NAVI]

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	12C	R	
Color of Wire			Signal Name [Specification]

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	7	W	
Color of Wire			Signal Name [Specification]
	8	B	
	11	W	
	12	L	

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
AV  
O  
P

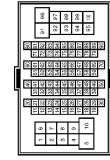
# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

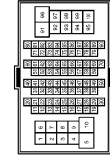
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
69	G	-
88	O	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
43	SHIELD	-
44	Y	-
45	BR	-
46	V	- [With NAVI]
49	R	- [With BOSE system]

50	G	- [With BOSE system]
57	O	-
61	O	-

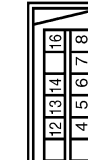


Connector No.	M18
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



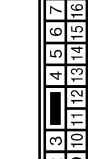
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16PW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	SB	-
5	Y	-
6	LG	-
7	B	-
11	L	-
12	P	-
13	R	- [With NAVI]
14	R	-

Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

15	G	-
16	W	-

# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M29
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH



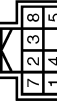
Terminal No.	Color of Wire	Signal Name [Specification]
3	SHIELD	-
4	W	-

Connector No.	M36
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY-TV



Terminal No.	Color of Wire	Signal Name [Specification]
24	P	-
31	L	-
33	B	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	L	SENSOR1
4	BR	SENSOR2
5	O	SENSOR3
7	B	GND
8	G	IGN

Connector No.	M63
Connector Name	CENTER SPEAKER
Connector Type	TK02FBR



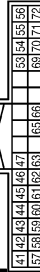
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	LG	-

Connector No.	M68
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH04FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
28	R	VEHICLE SPEED (6-PULSE)

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH02FW-NH



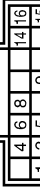
Terminal No.	Color of Wire	Signal Name [Specification]
56	L	CAN-H
72	P	CAN-L

Connector No.	M89
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	LG	-
5	O	-

Connector No.	M72
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
3	L	AGC
6	G	AV COMM (H)
8	R	AV COMM (L)
9	BR	SW GND
14	SB	DISK EJECT SIGNAL

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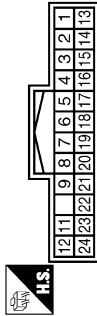
# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

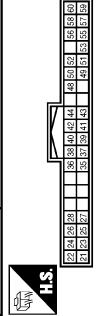
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	LG	ACC
4	B	SHIELD
5	R	AUX IMAGE GND
6	B	RGB (GGREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
10	L	COMM (CONT-)DISP
11	W	CAMERA IMAGE SIGNAL
12	W	

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
32	C	IGNITION
36	SB	PARKING BRAKE
37	O	REVERSE

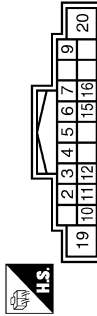
13	B	GND
14	SHIELD	SHIELD
15	G	AUX IMAGE SIGNAL
17	W	RGB (R-RED) SIGNAL
18	R	RGB (B-BLUE) SIGNAL
19	C	RGB SYNC
20	W	HP
21	SHIELD	SHIELD
22	P	COMM (DISP->CONT)
23	SHIELD	SHIELD

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	SOUND SIGNAL LH (+)
3	L	SOUND SIGNAL LH (-)
4	BR	VOICE GUIDANCE SIGNAL (+)
5	Y	VOICE GUIDANCE SIGNAL (-)
6	P	STRG SW A
7	GR	ACC
9	L	ILLUMINATION
10	B	SHIELD
11	R	SOUND SIGNAL RH (+)
12	G	SOUND SIGNAL RH (-)
15	B	STRG SW GND

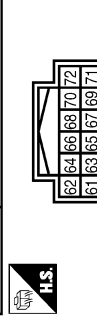
38	GR	VEHICLE SPEED (8-PULSE)
40	GR	CAMERA CONNECTION RECOGNITION
42	B	Control Signal 2
48	V	AV COMM (H)
49	LG	AV COMM (L)
50	G	AV COMM (H)
51	R	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Terminal No.	Color of Wire	Signal Name [Specification]
61	W	RGB (R-RED) SIGNAL
62	B	RGB (GGREEN) SIGNAL
63	R	RGB (B-BLUE) SIGNAL
64	SHIELD	SHIELD
65	G	RGB SYNC
66	SHIELD	SHIELD
67	B	RGB AREA (YS) SIGNAL
68	R	HP
69	W	VP
70	L	COMM (CONT->DISP)
71	P	COMM (DISP->CONT)

Connector No.	M80
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH18FW-CSZ



Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12FW-NH



16	L	STRG SW B
19	Y	BATTERY

72	SHIELD	SHIELD
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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH22FW-NH

Terminal No.	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88
Color of Wire	89 90 91 92 93 94 95 96 97 98 99 100 101 102 103

Terminal No.	Color of Wire	Signal Name [Specification]
79	R	iPod SOUND SIGNAL LH (+)
80	B	iPod SOUND SIGNAL RH (+)
81	SHIELD	SHIELD
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	W	AUX SOUND SIGNAL LH (+)
88	B	AUX SOUND SIGNAL GND
95	W	iPod SOUND SIGNAL LH (-)
96	G	iPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	R	AUX SOUND SIGNAL RH (+)

Connector No.	M111
Connector Name	iPOD ADAPTER
Connector Type	TH24FW-NH

Terminal No.	1 2 3 4 5 8 9 10 11 12
Color of Wire	13 14 15 16 17 19 21 22 23 24

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod ADAPTER->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTITY
12	W	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

Connector No.	M108
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS

Terminal No.	1 2 3 4 5 6 7 8 9 10
Color of Wire	11 12 13 14 15 16 17 18

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	- [With NAVI]
2	G	- [With NAVI]
3	SHIELD	- [With NAVI]

Terminal No.	14
Color of Wire	G
Signal Name [Specification]	iPod SOUND SIGNAL RH (-)
15	SHIELD
16	G
17	BR
18	SHIELD
19	SHIELD
21	W
22	G
23	R
24	B

Terminal No.	14
Color of Wire	G
Signal Name [Specification]	iPod SOUND SIGNAL RH (-)
15	SHIELD
16	G
17	BR
18	SHIELD
19	SHIELD
21	W
22	G
23	R
24	B

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-R25-R-LH-Z

Terminal No.	128 124
Color of Wire	112 108 104 100
Signal Name [Specification]	127 123 121 117 113 109
Terminal No.	126 122
Color of Wire	114 110 106 102 98
Signal Name [Specification]	125 121 117 113 109 105 101 97

Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

Connector No.	M112
Connector Name	iPod SIDE (WITH A/T)
Connector Type	IP16FGY

Terminal No.	1 2
Color of Wire	7 9 10 12 14 15 16

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTITY

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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M181
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	G	
3	O	
4	SHIELD	
5	W	
6	B	
7	R	
8	BR	
9	W	
10	L	
11	SHIELD	

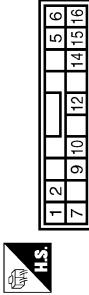
Connector No.	M381
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	SHIELD	
6	SHIELD	
7	G	
8	R	

12	P	-
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Connector No.	M182
Connector Name	iPod SIDE (WITH M/T)
Connector Type	IP116FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	L	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT13SHF-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
106	-	AM-FM MAIN
107	-	ANTENNA AMP_ON SIGNAL

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	-	
15	-	
17	-	

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FMRA JACK



Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SATELLITE ANTENNA
109	-	SHIELD

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




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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>M373</td></tr> <tr><td>Connector Name</td><td>AV CONTROL UNIT (WITH NAVI)</td></tr> <tr><td>Connector Type</td><td>GTBS-I/PP-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>110</td><td>111</td></tr> <tr><td>Color of Wire</td><td>--</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>GPS ANTENNA</td><td>SHIELD</td></tr> </table>	Connector No.	M373	Connector Name	AV CONTROL UNIT (WITH NAVI)	Connector Type	GTBS-I/PP-HU	Terminal No.	110	111	Color of Wire	--	--	Signal Name [Specification]	GPS ANTENNA	SHIELD	<table border="1"> <tr><td>Connector No.</td><td>M374</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>FAKRA</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>--</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td><td>--</td></tr> </table>	Connector No.	M374	Connector Name	WIRE TO WIRE	Connector Type	FAKRA	Terminal No.	1	2	Color of Wire	--	--	Signal Name [Specification]	--	--	<table border="1"> <tr><td>Connector No.</td><td>M375</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SSN-1/IPP-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>--</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td><td>--</td></tr> </table>	Connector No.	M375	Connector Name	WIRE TO WIRE	Connector Type	GT13SSN-1/IPP-HU	Terminal No.	1	2	Color of Wire	--	--	Signal Name [Specification]	--	--	<table border="1"> <tr><td>Connector No.</td><td>M376</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>GT13SS-1/IS-HU</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>--</td><td>--</td></tr> <tr><td>Signal Name [Specification]</td><td>--</td><td>--</td></tr> </table>	Connector No.	M376	Connector Name	WIRE TO WIRE	Connector Type	GT13SS-1/IS-HU	Terminal No.	1	2	Color of Wire	--	--	Signal Name [Specification]	--	--
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Signal Name [Specification]	ANTENNA AMP. ON SIGNAL	AM-FM MAIN																																																													

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# IPOD ADAPTER

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
3	--	SATELLITE ANTENNA
4	--	SHIELD

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TK10FW-NSB



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-- [WB NAVI]
2	G	-- [WB NAVI]
3	SHIELD	--

Connector No.	R7
Connector Name	MICROPHONE
Connector Type	TK6AFW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	MICROPHONE SIGNAL [WB NAVI]
2	SHIELD	MICROPHONE GND
4	W	MICROPHONE VCC [WB NAVI]

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# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

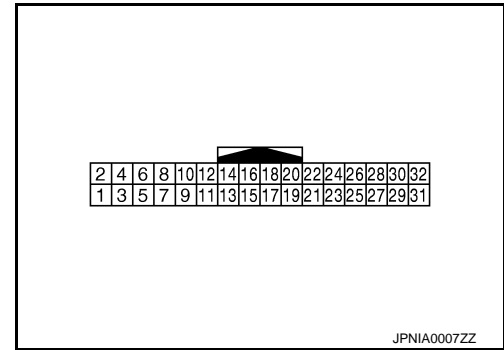
[BOSE AUDIO WITH NAVIGATION]

## CAMERA CONTROL UNIT

Reference Value

INFOID:000000004371863

### TERMINAL LAYOUT



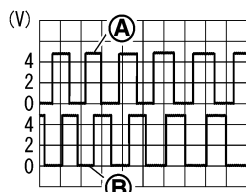
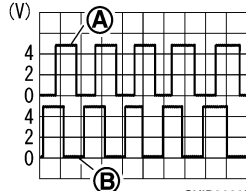
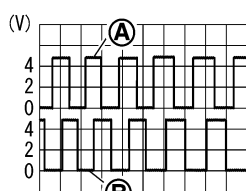
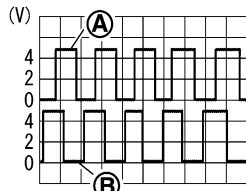
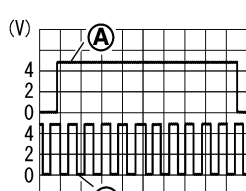
### PHYSICAL VALUES

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
5	—	Shield	—	—	—	—
6 (B)	Ground	Camera image signal	Input	Ignition switch ON	At rear view camera image is displayed.	
7 (W)	Ground	Ground	—	Ignition switch ON	—	0 V
8 (R)	Ground	Camera power supply	Output	Ignition switch ON	R position	6.0 V
					Other than R position	0 V
11	—	Shield	—	—	—	—
12 (W)	Ground	Camera image signal	Output	Ignition switch ON	At rear view camera image is displayed.	
14 (GR)	Ground	Camera connection recog- nition signal	Output	Ignition switch ON	Connected to camera con- trol unit connector.	0 V
					Not connected to camera control unit connector.	5.0 V
17 (P)	—	AV communication signal (L)	Input/ Output	—	—	—
18 (L)	—	AV communication signal (H)	Input/ Output	—	—	—
19 (R)	—	AV communication signal (L)	Input/ Output	—	—	—

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
20 (G)	—	AV communication signal (H)	Input/ Output	—	—	—
22 (GR)	Ground	Reverse signal	Input	Ignition switch ON	R position	12.0 V
				Ignition switch ON	Other than R position	0 V
23 (L)	Ground	Sensor signal 1	Input	Ignition switch ON	Turn the steering to the right.	 <p style="text-align: right; font-size: small;">SKIB3827E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
					Turn the steering to the left.	 <p style="text-align: right; font-size: small;">SKIB3828E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
24 (BR)	Ground	Sensor signal 2	Input	Ignition switch ON	Turn the steering to the right.	 <p style="text-align: right; font-size: small;">SKIB3827E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
					Turn the steering to the left.	 <p style="text-align: right; font-size: small;">SKIB3828E</p> <p style="text-align: center;">A: Sensor signal 1 B: Sensor signal 2</p>
25 (O)	Ground	Sensor signal 3	Input	Ignition switch ON	Turn the steering around the neutral position.	 <p style="text-align: right; font-size: small;">SKIB3829E</p> <p style="text-align: center;">A: Sensor signal 3 B: Sensor signal 1</p>

A  
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L  
M

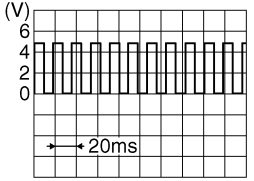
AV

O  
P

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

Terminal (Wire color)		Description		Condition		Reference value (Approx.)
+	-	Signal name	Input/ Output			
26 (V)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	When vehicle speed is ap- prox. 40 km/h (25 MPH)	<p><b>NOTE:</b> Maximum voltage may be 12.0 V due to specifications (connected units).</p>  <p style="text-align: right; font-size: small;">SKIA6649J</p>
30 (SB)	Ground	ACC power supply	Input	Ignition switch ACC	—	Battery voltage
31 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
32 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage

## Wiring Diagram - BOSE AUDIO WITH NAVIGATION SYSTEM -

INFOID:000000004928942

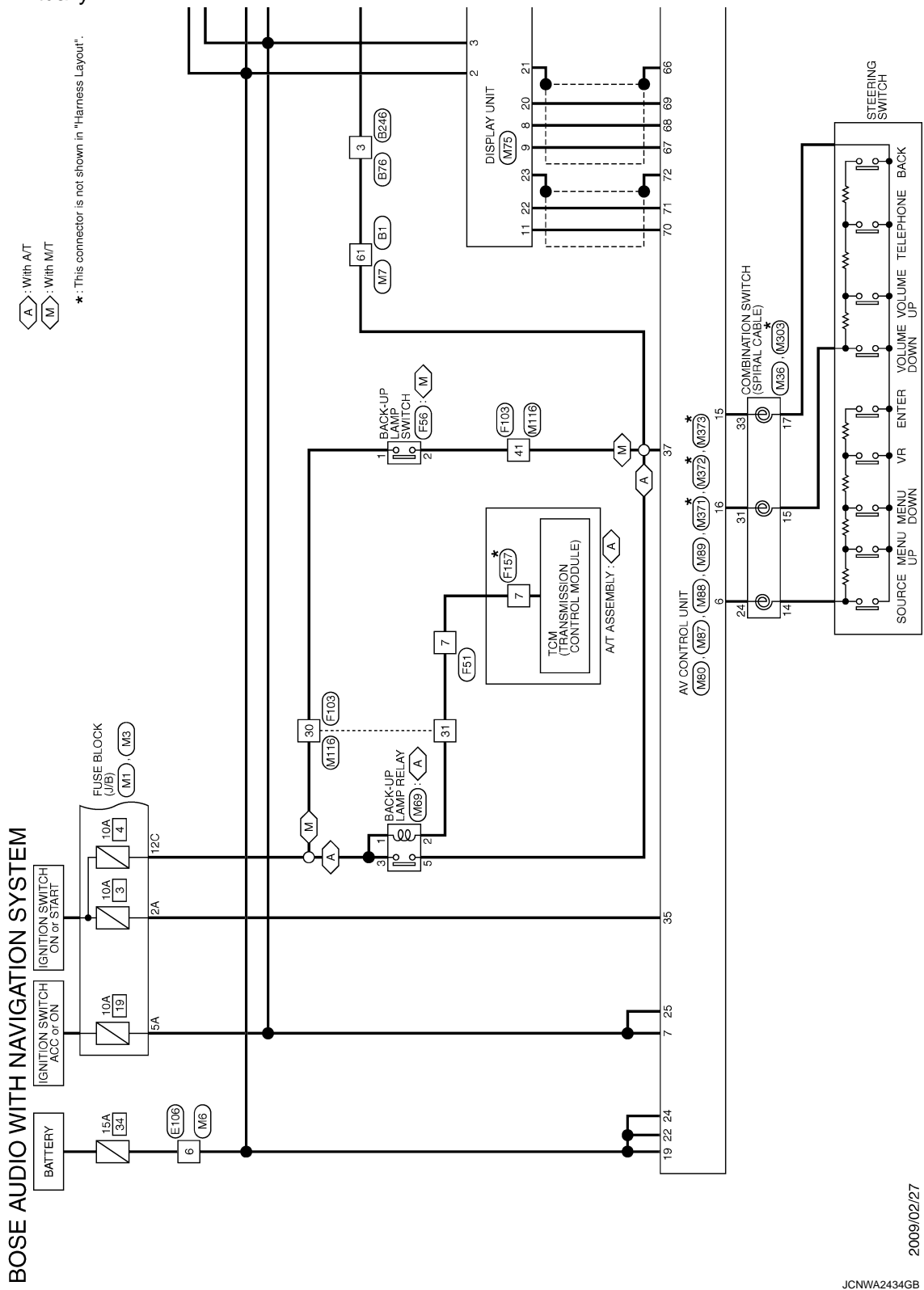
**NOTE:**

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

The name MULTIFUNCTION SWITCH indicates the integration of PRESET SWITCH and MULTIFUNCTION SWITCH virtually.



2009/02/27

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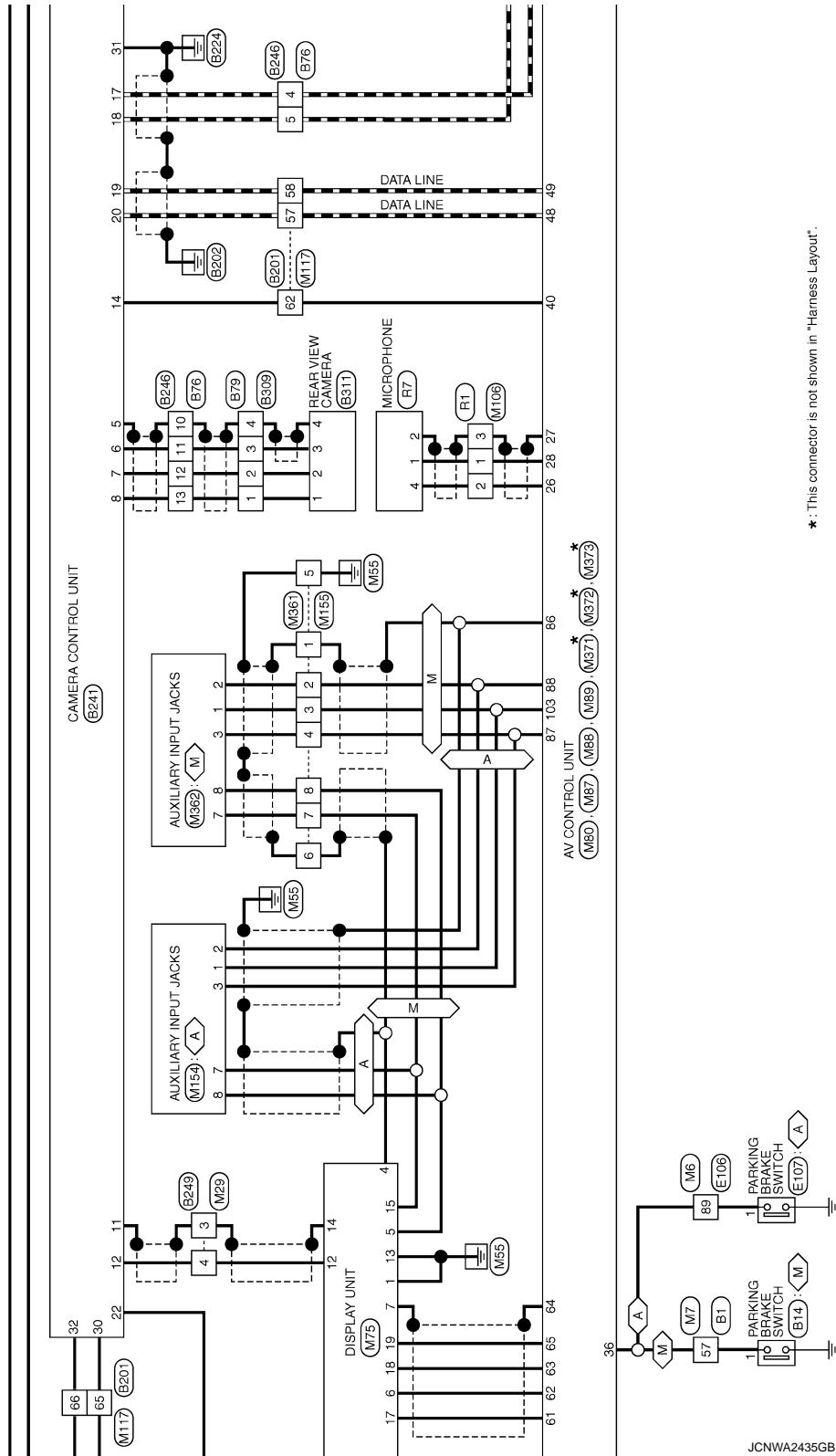
A  
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# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

A : With AVT  
M : With MFT

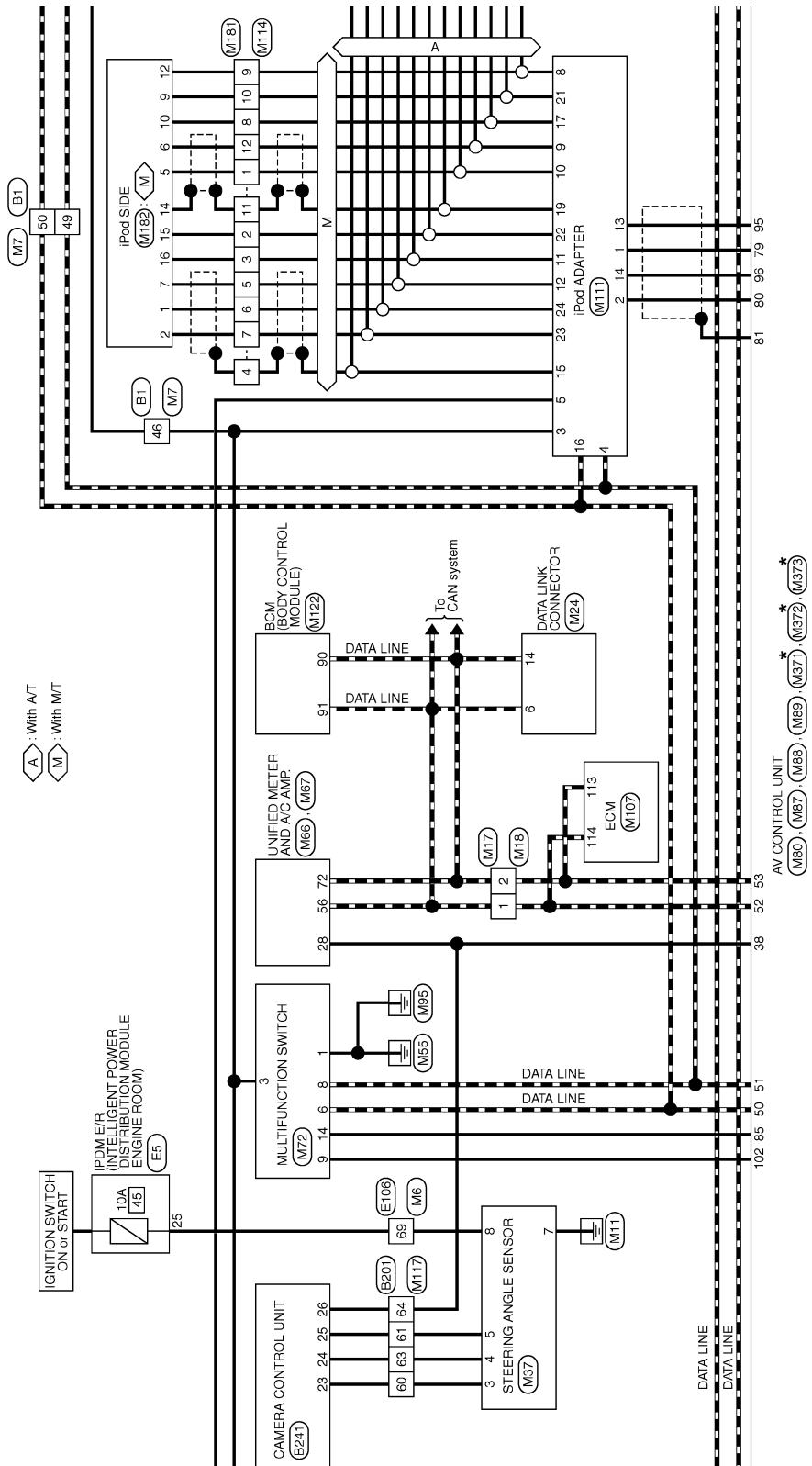




# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



\*: This connector is not shown in "Harness Layout".

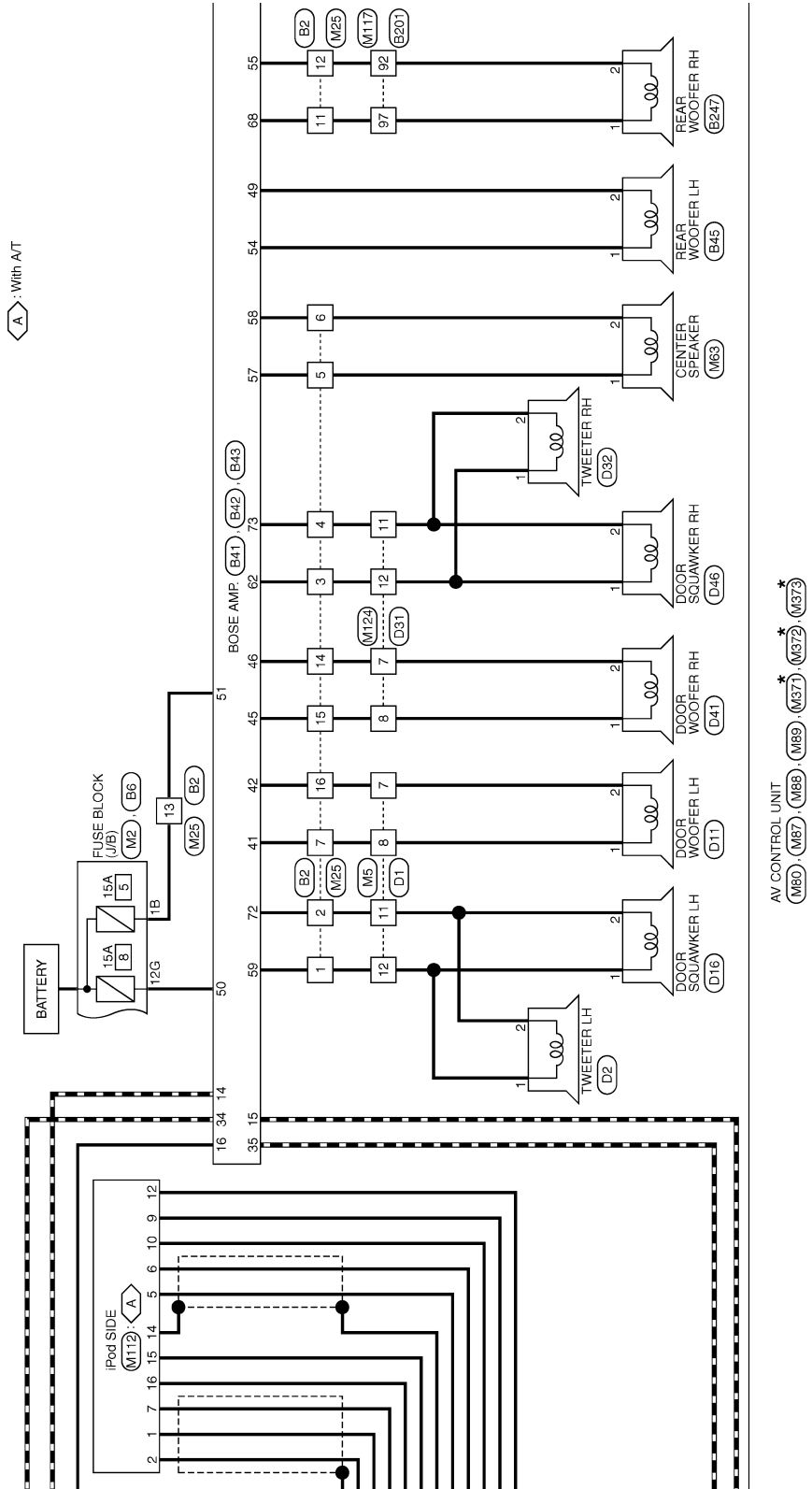
A  
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M  
AV  
O  
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# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



⬠ : With A/T

\* : This connector is not shown in "Harness Layout".

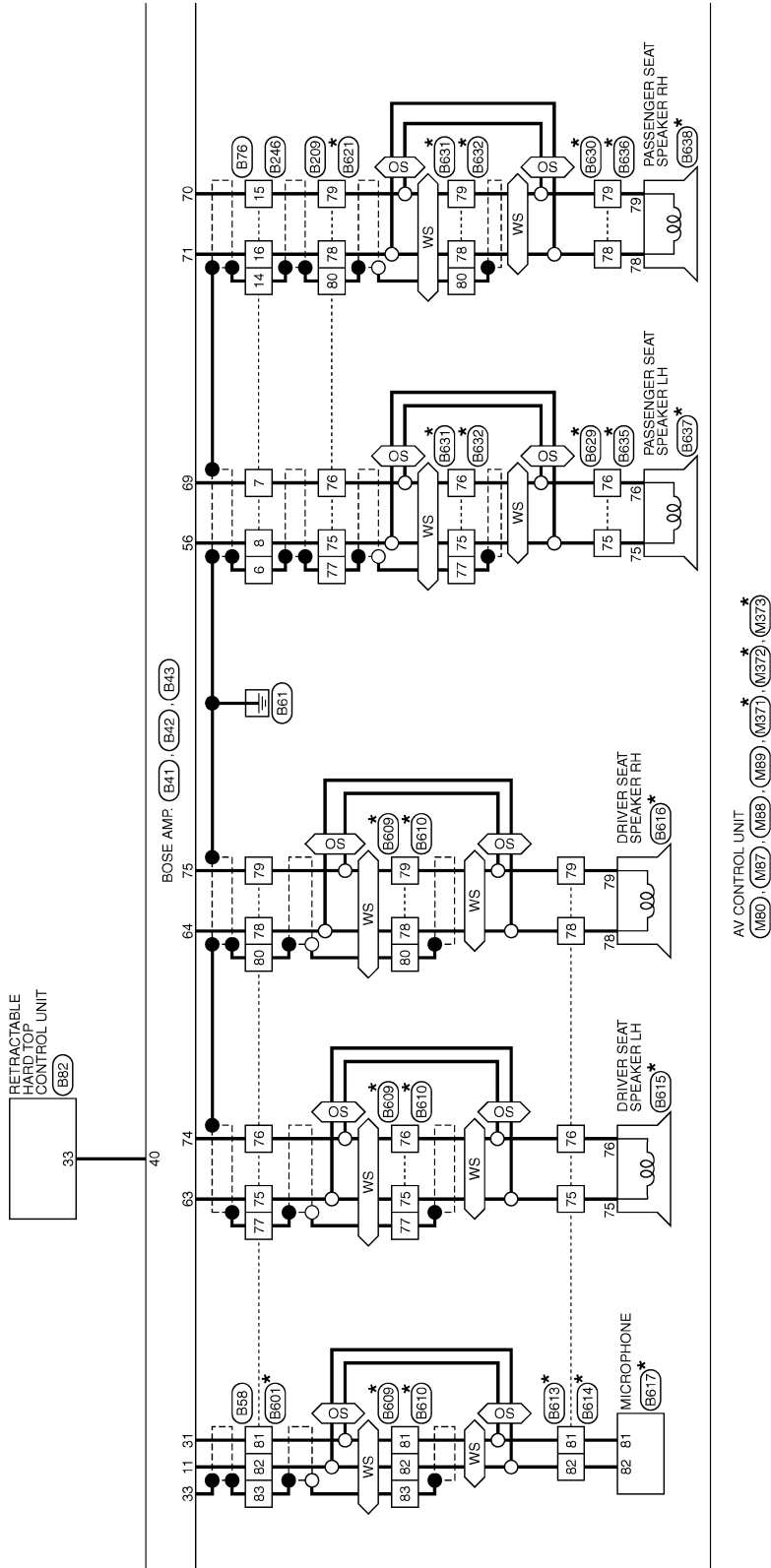
JCNWA2437GB

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

WS : With climate controlled seat  
 OS : Without climate controlled seat



\*: This connector is not shown in "Harness Layout".

JCNWA2438GB

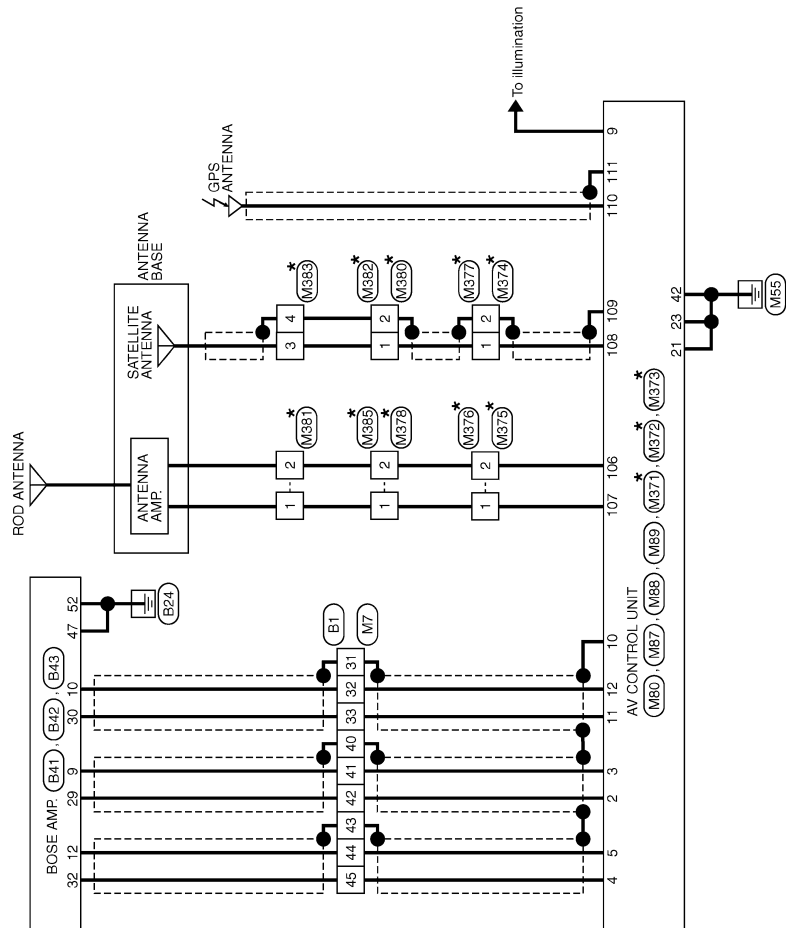
A  
 B  
 C  
 D  
 E  
 F  
 G  
 H  
 I  
 J  
 K  
 L  
 M  
 N  
 O  
 P

AV

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]



\* : This connector is not shown in "Harness Layout".

JCNWA2439GB

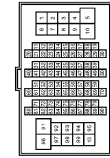
# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



50	G	- [With BOSE system]
57	V	-
61	O	-

Connector No.	B2
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS

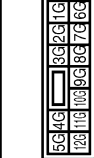


15	G
16	W

Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
43	SHIELD	-
44	SB	-
45	V	-
46	W	-
48	R	- [With BOSE system]

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	V	-
4	LG	-
5	O	-
6	P	-
7	B	-
11	LG	-
12	O	-
13	GR	-
14	R	-

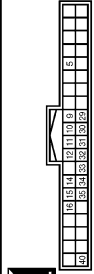
Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS12BFS-CS



Connector No.	B14
Connector Name	PARKING BRAKE SWITCH (WITH M/T)
Connector Type	PD1FB-A



Connector No.	B41
Connector Name	BOSE AMP.
Connector Type	TH40FW-NH



33	SHIELD
34	G
35	L
40	V

Terminal No.	12G	Y	-
--------------	-----	---	---

Terminal No.	1	V	-
--------------	---	---	---

Terminal No.	Color of Wire	Signal Name [Specification]
9	L	SOUND SIGNAL LH (-)
10	G	SOUND SIGNAL RH (-)
11	G	MICROPHONE SIGNAL (-)
12	SB	VOICE GUIDANCE SIGNAL (-)
14	R	AV COMM (L)
15	P	AV COMM (L) ACC
16	W	ACC
20	P	SOUND SIGNAL LH (+)
20	R	SOUND SIGNAL RH (+)
31	Y	MICROPHONE SIGNAL (+)
32	V	VOICE GUIDANCE SIGNAL (+)

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A  
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G  
H  
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J  
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O  
P

AV

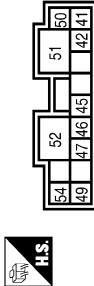
# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

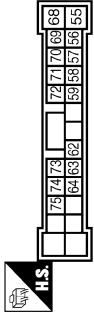
[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B42
Connector Name	BOSE AMP.
Connector Type	SGM12FBR-SJM2



Connector No.	B43
Connector Name	BOSE AMP.
Connector Type	SCA18FBR-SG44



71	Y	SOUND SIGNAL FR RH HEADREST RH (+)
72	W	SOUND SIGNAL FRONT LH (-)
73	LG	SOUND SIGNAL FRONT RH (-)
74	Y	SOUND SIGNAL FR LH HEADREST LH (-)
75	B	SOUND SIGNAL FR LH HEADREST RH (-)

Connector No.	B45
Connector Name	REAR WOOFER LH
Connector Type	NS12ZFW-CS

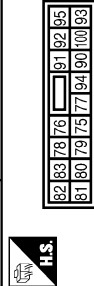


Terminal No.	Color of Wire	Signal Name [Specification]
41	B	SOUND SIGNAL DOOR WOOFER LH (+)
42	W	SOUND SIGNAL DOOR WOOFER LH (-)
45	G	SOUND SIGNAL DOOR WOOFER RH (+)
46	R	SOUND SIGNAL DOOR WOOFER RH (-)
47	B	GND
49	P	SOUND SIGNAL WOOFER REAR LH (-)
50	Y	BATTERY
51	GR	BATTERY
52	B	GND
54	L	SOUND SIGNAL WOOFER REAR LH (+)

Terminal No.	Color of Wire	Signal Name [Specification]
55	O	SOUND SIGNAL WOOFER REAR RH (-)
56	W	SOUND SIGNAL FR RH HEADREST LH (+)
57	O	SOUND SIGNAL CENTER (+)
58	P	SOUND SIGNAL CENTER (-)
59	L	SOUND SIGNAL FRONT LH (+)
62	V	SOUND SIGNAL FRONT RH (+)
63	G	SOUND SIGNAL FR LH HEADREST LH (+)
64	W	SOUND SIGNAL FR LH HEADREST RH (+)
68	LG	SOUND SIGNAL WOOFER REAR RH (+)
69	B	SOUND SIGNAL FR RH HEADREST LH (-)
70	G	SOUND SIGNAL FR RH HEADREST RH (-)

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	B58
Connector Name	WIRE TO WIRE
Connector Type	NS18FBR-CS



15	G	-
16	Y	-

Connector No.	B79
Connector Name	WIRE TO WIRE
Connector Type	TH108MP-NH



Terminal No.	Color of Wire	Signal Name [Specification]
75	G	-
76	Y	-
77	SHIELD	-
78	W	-
79	B	-
80	SHIELD	-
81	Y	-
82	G	-
83	SHIELD	-

Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	SHIELD	-

JCNWA2441GB

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B32
Connector Name	RETRACTABLE HARD TOP CONTROL UNIT
Connector Type	TH40FW-NH



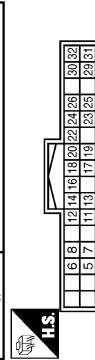
Terminal No.	Color of Wire	Signal Name [Specification]
33	V	ROOF STATUS SIGNAL (AUDIO)

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH60FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
57	G	-
58	R	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	V	-
65	SB	-
66	Y	-
92	P	- [With BOSE system]
97	L	- [With BOSE system]

Connector No.	B241
Connector Name	CAMERA CONTROL UNIT
Connector Type	TH22FW-NH



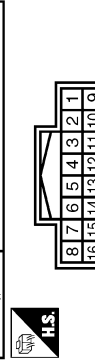
Terminal No.	Color of Wire	Signal Name [Specification]
5	SHIELD	SHIELD
6	B	CAMERA IMAGE SIGNAL
7	W	GND
8	R	CAMERA POWER SUPPLY
11	SHIELD	SHIELD
12	W	CAMERA IMAGE SIGNAL
14	GR	CAMERA CONNECTION RECOGNITION
17	P	AV COMM (L)
18	L	AV COMM (R)
22	R	AV COMM (L)
24	G	AV COMM (R)
26		AV COMM (L)
28		AV COMM (R)
29		AV COMM (H)
31		AV COMM (H)

Connector No.	B2109
Connector Name	WIRE TO WIRE
Connector Type	NS16FER-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	W	-
76	B	-
77	SHIELD	-
78	Y	-
79	G	-
80	SHIELD	-

Connector No.	B246
Connector Name	WIRE TO WIRE
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	P	-
5	L	-
6	SHIELD	-
7	B	-
8	W	-
10	SHIELD	-
11	B	-
12	W	-
13	R	-
14	SHIELD	-

15	G
16	Y

A  
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I  
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AV

















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# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>B247</td></tr> <tr><td>Connector Name</td><td>REAR WOOFER RH</td></tr> <tr><td>Connector Type</td><td>NS02FW-CS</td></tr> </table>  	Connector No.	B247	Connector Name	REAR WOOFER RH	Connector Type	NS02FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>P</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	P	Signal Name [Specification]	-	-																					
Connector No.	B247																																				
Connector Name	REAR WOOFER RH																																				
Connector Type	NS02FW-CS																																				
Terminal No.	1	2																																			
Color of Wire	L	P																																			
Signal Name [Specification]	-	-																																			
<table border="1"> <tr><td>Connector No.</td><td>B249</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH04FW-NH</td></tr> </table>  	Connector No.	B249	Connector Name	WIRE TO WIRE	Connector Type	TH04FW-NH	<table border="1"> <tr><td>Terminal No.</td><td>3</td><td>4</td></tr> <tr><td>Color of Wire</td><td>SHIELD</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	3	4	Color of Wire	SHIELD	W	Signal Name [Specification]	-	-																					
Connector No.	B249																																				
Connector Name	WIRE TO WIRE																																				
Connector Type	TH04FW-NH																																				
Terminal No.	3	4																																			
Color of Wire	SHIELD	W																																			
Signal Name [Specification]	-	-																																			
<table border="1"> <tr><td>Connector No.</td><td>B309</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH08FW-NH</td></tr> </table>  	Connector No.	B309	Connector Name	WIRE TO WIRE	Connector Type	TH08FW-NH	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> <tr><td>Color of Wire</td><td>R</td><td>W</td><td>Y</td><td>SHIELD</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	1	2	3	4	Color of Wire	R	W	Y	SHIELD	Signal Name [Specification]	-	-	-	-															
Connector No.	B309																																				
Connector Name	WIRE TO WIRE																																				
Connector Type	TH08FW-NH																																				
Terminal No.	1	2	3	4																																	
Color of Wire	R	W	Y	SHIELD																																	
Signal Name [Specification]	-	-	-	-																																	
<table border="1"> <tr><td>Connector No.</td><td>B311</td></tr> <tr><td>Connector Name</td><td>REAR VIEW CAMERA</td></tr> <tr><td>Connector Type</td><td>TH04MW-NH</td></tr> </table>  	Connector No.	B311	Connector Name	REAR VIEW CAMERA	Connector Type	TH04MW-NH	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> <tr><td>Color of Wire</td><td>R</td><td>W</td><td>Y</td><td>SHIELD</td></tr> <tr><td>Signal Name [Specification]</td><td>CAMERA ON SIGNAL</td><td>GND</td><td>CAMERA IMAGE SIGNAL</td><td>SHIELD</td></tr> </table>	Terminal No.	1	2	3	4	Color of Wire	R	W	Y	SHIELD	Signal Name [Specification]	CAMERA ON SIGNAL	GND	CAMERA IMAGE SIGNAL	SHIELD															
Connector No.	B311																																				
Connector Name	REAR VIEW CAMERA																																				
Connector Type	TH04MW-NH																																				
Terminal No.	1	2	3	4																																	
Color of Wire	R	W	Y	SHIELD																																	
Signal Name [Specification]	CAMERA ON SIGNAL	GND	CAMERA IMAGE SIGNAL	SHIELD																																	
<table border="1"> <tr><td>Connector No.</td><td>B600</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>NS16MW-CS</td></tr> </table>  	Connector No.	B600	Connector Name	WIRE TO WIRE	Connector Type	NS16MW-CS	<table border="1"> <tr><td>Terminal No.</td><td>75</td><td>76</td><td>77</td><td>78</td><td>79</td><td>80</td><td>81</td><td>82</td><td>83</td></tr> <tr><td>Color of Wire</td><td>P</td><td>L</td><td>B/Y</td><td>R</td><td>G</td><td>B/W</td><td>B</td><td>W</td><td>B/R</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	75	76	77	78	79	80	81	82	83	Color of Wire	P	L	B/Y	R	G	B/W	B	W	B/R	Signal Name [Specification]	-	-	-	-	-	-	-	-	-
Connector No.	B600																																				
Connector Name	WIRE TO WIRE																																				
Connector Type	NS16MW-CS																																				
Terminal No.	75	76	77	78	79	80	81	82	83																												
Color of Wire	P	L	B/Y	R	G	B/W	B	W	B/R																												
Signal Name [Specification]	-	-	-	-	-	-	-	-	-																												
<table border="1"> <tr><td>Connector No.</td><td>B601</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>NS16MR-CS</td></tr> </table>  	Connector No.	B601	Connector Name	WIRE TO WIRE	Connector Type	NS16MR-CS	<table border="1"> <tr><td>Terminal No.</td><td>75</td><td>76</td><td>77</td><td>78</td><td>79</td><td>80</td><td>81</td><td>82</td><td>83</td></tr> <tr><td>Color of Wire</td><td>P</td><td>L</td><td>B/Y</td><td>R</td><td>G</td><td>B/W</td><td>B</td><td>W</td><td>B/R</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	75	76	77	78	79	80	81	82	83	Color of Wire	P	L	B/Y	R	G	B/W	B	W	B/R	Signal Name [Specification]	-	-	-	-	-	-	-	-	-
Connector No.	B601																																				
Connector Name	WIRE TO WIRE																																				
Connector Type	NS16MR-CS																																				
Terminal No.	75	76	77	78	79	80	81	82	83																												
Color of Wire	P	L	B/Y	R	G	B/W	B	W	B/R																												
Signal Name [Specification]	-	-	-	-	-	-	-	-	-																												
<table border="1"> <tr><td>Connector No.</td><td>B610</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>NS16FW-CS</td></tr> </table>  	Connector No.	B610	Connector Name	WIRE TO WIRE	Connector Type	NS16FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>75</td><td>76</td><td>77</td><td>78</td><td>79</td><td>80</td><td>81</td><td>82</td><td>83</td></tr> <tr><td>Color of Wire</td><td>P</td><td>L</td><td>B/Y</td><td>R</td><td>G</td><td>B/W</td><td>B</td><td>W</td><td>B/R</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	75	76	77	78	79	80	81	82	83	Color of Wire	P	L	B/Y	R	G	B/W	B	W	B/R	Signal Name [Specification]	-	-	-	-	-	-	-	-	-
Connector No.	B610																																				
Connector Name	WIRE TO WIRE																																				
Connector Type	NS16FW-CS																																				
Terminal No.	75	76	77	78	79	80	81	82	83																												
Color of Wire	P	L	B/Y	R	G	B/W	B	W	B/R																												
Signal Name [Specification]	-	-	-	-	-	-	-	-	-																												
<table border="1"> <tr><td>Connector No.</td><td>B613</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>NS08MW</td></tr> </table>  	Connector No.	B613	Connector Name	WIRE TO WIRE	Connector Type	NS08MW	<table border="1"> <tr><td>Terminal No.</td><td>75</td><td>76</td><td>78</td><td>79</td><td>82</td></tr> <tr><td>Color of Wire</td><td>P</td><td>L</td><td>R</td><td>G</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	75	76	78	79	82	Color of Wire	P	L	R	G	W	Signal Name [Specification]	-	-	-	-	-												
Connector No.	B613																																				
Connector Name	WIRE TO WIRE																																				
Connector Type	NS08MW																																				
Terminal No.	75	76	78	79	82																																
Color of Wire	P	L	R	G	W																																
Signal Name [Specification]	-	-	-	-	-																																

JCNWA2443GB



# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B617
Connector Name	MICROPHONE
Connector Type	TK02FBR



Terminal No.	Color of Wire	Signal Name [Specification]
81	-	-
82	-	-

Connector No.	B616
Connector Name	DRIVER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B615
Connector Name	DRIVER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B614
Connector Name	WIRE TO WIRE
Connector Type	20BFW



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-
78	-	-
79	-	-
81	-	-
82	-	-

Connector No.	B631
Connector Name	WIRE TO WIRE
Connector Type	NS10MY-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	B630
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



Terminal No.	Color of Wire	Signal Name [Specification]
78	R	-
79	G	-

Connector No.	B629
Connector Name	WIRE TO WIRE
Connector Type	TK02MGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-

Connector No.	B621
Connector Name	WIRE TO WIRE
Connector Type	NS16BFF-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
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# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	B637
Connector Name	PASSENGER SEAT SPEAKER LH
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B638
Connector Name	WIRE TO WIRE
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-

Connector No.	B635
Connector Name	WIRE TO WIRE
Connector Type	TK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
75	-	-
76	-	-

Connector No.	B632
Connector Name	WIRE TO WIRE
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
75	P	-
76	L	-
77	B/Y	-
78	R	-
79	G	-
80	B/W	-

Connector No.	D11
Connector Name	DOOR WOOFER LH
Connector Type	NS02FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	D2
Connector Name	TWEETER LH
Connector Type	TK02MBR-P



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-

Connector No.	D1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	W	-
12	L	-

Connector No.	B638
Connector Name	PASSENGER SEAT SPEAKER RH
Connector Type	TK02FW



Terminal No.	Color of Wire	Signal Name [Specification]
78	-	-
79	-	-




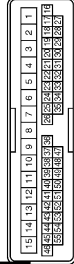







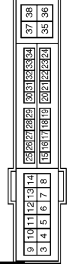

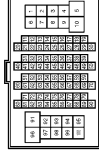


JCNWA2445GB

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

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Connector No.	D16																					
Connector Name	DOOR SQUAWKER LH																					
Connector Type	TK02FBR																					
Terminal No.	1	2																				
Color of Wire	L	W																				
Signal Name [Specification]	-	-																				
<table border="1"> <tr><td>Connector No.</td><td>D31</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH40FW-CS1S</td></tr> </table>  	Connector No.	D31	Connector Name	WIRE TO WIRE	Connector Type	TH40FW-CS1S	<table border="1"> <tr><td>Terminal No.</td><td>7</td><td>8</td><td>11</td><td>12</td></tr> <tr><td>Color of Wire</td><td>R</td><td>G</td><td>W</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	7	8	11	12	Color of Wire	R	G	W	L	Signal Name [Specification]	-	-	-	-
Connector No.	D31																					
Connector Name	WIRE TO WIRE																					
Connector Type	TH40FW-CS1S																					
Terminal No.	7	8	11	12																		
Color of Wire	R	G	W	L																		
Signal Name [Specification]	-	-	-	-																		
<table border="1"> <tr><td>Connector No.</td><td>D32</td></tr> <tr><td>Connector Name</td><td>TWEETER RH</td></tr> <tr><td>Connector Type</td><td>TK02MBR-P</td></tr> </table>  	Connector No.	D32	Connector Name	TWEETER RH	Connector Type	TK02MBR-P	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	Signal Name [Specification]	-	-						
Connector No.	D32																					
Connector Name	TWEETER RH																					
Connector Type	TK02MBR-P																					
Terminal No.	1	2																				
Color of Wire	L	W																				
Signal Name [Specification]	-	-																				
<table border="1"> <tr><td>Connector No.</td><td>D41</td></tr> <tr><td>Connector Name</td><td>DOOR WOOFER RH</td></tr> <tr><td>Connector Type</td><td>NS02FW-CS</td></tr> </table>  	Connector No.	D41	Connector Name	DOOR WOOFER RH	Connector Type	NS02FW-CS	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>G</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	1	2	Color of Wire	G	R	Signal Name [Specification]	-	-						
Connector No.	D41																					
Connector Name	DOOR WOOFER RH																					
Connector Type	NS02FW-CS																					
Terminal No.	1	2																				
Color of Wire	G	R																				
Signal Name [Specification]	-	-																				
<table border="1"> <tr><td>Connector No.</td><td>D46</td></tr> <tr><td>Connector Name</td><td>DOOR SQUAWKER RH</td></tr> <tr><td>Connector Type</td><td>TK02FBR</td></tr> </table>  	Connector No.	D46	Connector Name	DOOR SQUAWKER RH	Connector Type	TK02FBR	<table border="1"> <tr><td>Terminal No.</td><td>1</td><td>2</td></tr> <tr><td>Color of Wire</td><td>L</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td></tr> </table>	Terminal No.	1	2	Color of Wire	L	W	Signal Name [Specification]	-	-						
Connector No.	D46																					
Connector Name	DOOR SQUAWKER RH																					
Connector Type	TK02FBR																					
Terminal No.	1	2																				
Color of Wire	L	W																				
Signal Name [Specification]	-	-																				
<table border="1"> <tr><td>Connector No.</td><td>E5</td></tr> <tr><td>Connector Name</td><td>INTELLIGENT POWER DISTRIBUTION MODULE (IPD) BOSE AUDIO</td></tr> <tr><td>Connector Type</td><td>TH20FW-CS12-M-TV</td></tr> </table>  	Connector No.	E5	Connector Name	INTELLIGENT POWER DISTRIBUTION MODULE (IPD) BOSE AUDIO	Connector Type	TH20FW-CS12-M-TV	<table border="1"> <tr><td>Terminal No.</td><td>25</td></tr> <tr><td>Color of Wire</td><td>G</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Terminal No.	25	Color of Wire	G	Signal Name [Specification]	-									
Connector No.	E5																					
Connector Name	INTELLIGENT POWER DISTRIBUTION MODULE (IPD) BOSE AUDIO																					
Connector Type	TH20FW-CS12-M-TV																					
Terminal No.	25																					
Color of Wire	G																					
Signal Name [Specification]	-																					
<table border="1"> <tr><td>Connector No.</td><td>E106</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>TH80FW-CS10-TM4</td></tr> </table>  	Connector No.	E106	Connector Name	WIRE TO WIRE	Connector Type	TH80FW-CS10-TM4	<table border="1"> <tr><td>Terminal No.</td><td>6</td><td>69</td><td>89</td></tr> <tr><td>Color of Wire</td><td>Y</td><td>W</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td><td>-</td><td>-</td></tr> </table>	Terminal No.	6	69	89	Color of Wire	Y	W	O	Signal Name [Specification]	-	-	-			
Connector No.	E106																					
Connector Name	WIRE TO WIRE																					
Connector Type	TH80FW-CS10-TM4																					
Terminal No.	6	69	89																			
Color of Wire	Y	W	O																			
Signal Name [Specification]	-	-	-																			
<table border="1"> <tr><td>Connector No.</td><td>E107</td></tr> <tr><td>Connector Name</td><td>PARKING BRAKE SWITCH (WITH A/T)</td></tr> <tr><td>Connector Type</td><td>TE01FW</td></tr> </table>  	Connector No.	E107	Connector Name	PARKING BRAKE SWITCH (WITH A/T)	Connector Type	TE01FW	<table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td>-</td></tr> </table>	Terminal No.	1	Color of Wire	O	Signal Name [Specification]	-									
Connector No.	E107																					
Connector Name	PARKING BRAKE SWITCH (WITH A/T)																					
Connector Type	TE01FW																					
Terminal No.	1																					
Color of Wire	O																					
Signal Name [Specification]	-																					

A  
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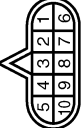



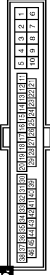

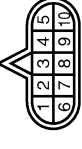





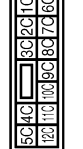

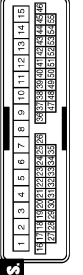
AV

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

<table border="1"> <tr><td>Connector No.</td><td>F51</td></tr> <tr><td>Connector Name</td><td>A/T ASSEMBLY</td></tr> <tr><td>Connector Type</td><td>RK1DFG-D0Y</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>7</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Connector No.	F51	Connector Name	A/T ASSEMBLY	Connector Type	RK1DFG-D0Y	Terminal No.	7	Color of Wire	R	Signal Name [Specification]		<table border="1"> <tr><td>Connector No.</td><td>F56</td></tr> <tr><td>Connector Name</td><td>BACK-UP LAMP SWITCH</td></tr> <tr><td>Connector Type</td><td>RK02FB</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Connector No.	F56	Connector Name	BACK-UP LAMP SWITCH	Connector Type	RK02FB	Terminal No.	1	Color of Wire	R	Signal Name [Specification]		Terminal No.	2	Color of Wire	O	Signal Name [Specification]		<table border="1"> <tr><td>Connector No.</td><td>F103</td></tr> <tr><td>Connector Name</td><td>WIRE TO WIRE</td></tr> <tr><td>Connector Type</td><td>1K38FW-NS10</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>30</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>31</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>41</td></tr> <tr><td>Color of Wire</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Connector No.	F103	Connector Name	WIRE TO WIRE	Connector Type	1K38FW-NS10	Terminal No.	30	Color of Wire	R	Signal Name [Specification]		Terminal No.	31	Color of Wire	R	Signal Name [Specification]		Terminal No.	41	Color of Wire	O	Signal Name [Specification]		<table border="1"> <tr><td>Connector No.</td><td>F157</td></tr> <tr><td>Connector Name</td><td>TCM (TRANSMISSION CONTROL MODULE)</td></tr> <tr><td>Connector Type</td><td>SP1DFG</td></tr> </table>   <table border="1"> <tr><td>Terminal No.</td><td>7</td></tr> <tr><td>Color of Wire</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td>REV/LAMP RLY</td></tr> </table>	Connector No.	F157	Connector Name	TCM (TRANSMISSION CONTROL MODULE)	Connector Type	SP1DFG	Terminal No.	7	Color of Wire	L	Signal Name [Specification]	REV/LAMP RLY												
Connector No.	F51																																																																																
Connector Name	A/T ASSEMBLY																																																																																
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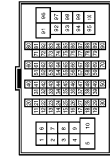
# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

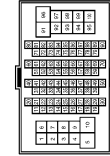
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
6	Y	-
69	G	-
89	O	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
31	SHIELD	-
32	G	-
33	R	-
40	SHIELD	-
41	L	-
42	P	-
43	SHIELD	-
44	Y	-
45	BR	-
46	V	- [With NAVI]
49	R	- [With BOSE system]

Connector No.	M8
Connector Name	WIRE TO WIRE
Connector Type	TK02MW



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

50	G	- [With BOSE system]
57	O	-
61	O	-



Connector No.	M17
Connector Name	WIRE TO WIRE
Connector Type	TK02FW

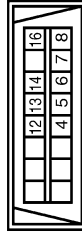
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	P	-

Connector No.	M25
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	BR	-
4	SB	-
5	Y	-
6	LG	-
7	B	-
11	L	-
12	P	-
13	R	- [With NAVI]
14	R	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
6	L	-
14	P	-

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
O  
P

AV





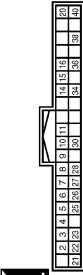

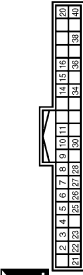
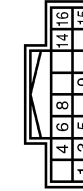
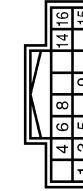

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# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

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Signal Name [Specification]																																											
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<table border="1"> <tr><td>Connector No.</td><td>M67</td></tr> <tr><td>Connector Name</td><td>UNIFIED METER AND A/C AMP.</td></tr> <tr><td>Connector Type</td><td>TH02FW-NH</td></tr> </table> 	Connector No.	M67	Connector Name	UNIFIED METER AND A/C AMP.	Connector Type	TH02FW-NH	<table border="1"> <tr><td>Terminal No.</td><td>56</td></tr> <tr><td>Color of Wire</td><td>L</td></tr> <tr><td>Signal Name [Specification]</td><td>CAN-H</td></tr> <tr><td>Terminal No.</td><td>72</td></tr> <tr><td>Color of Wire</td><td>P</td></tr> <tr><td>Signal Name [Specification]</td><td>CAN-L</td></tr> </table>	Terminal No.	56	Color of Wire	L	Signal Name [Specification]	CAN-H	Terminal No.	72	Color of Wire	P	Signal Name [Specification]	CAN-L																								
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Signal Name [Specification]	AOC																																										
Terminal No.	6																																										
Color of Wire	G																																										
Signal Name [Specification]	AV COMM (H)																																										
Terminal No.	8																																										
Color of Wire	R																																										
Signal Name [Specification]	AV COMM (L)																																										
Terminal No.	9																																										
Color of Wire	BR																																										
Signal Name [Specification]	SW GND																																										
Terminal No.	14																																										
Color of Wire	SB																																										
Signal Name [Specification]	DISK EJECT SIGNAL																																										
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Connector No.	M72																																										
Connector Name	MULTIFUNCTION SWITCH																																										
Connector Type	TH16FW-NH																																										
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Signal Name [Specification]	DISK EJECT SIGNAL																																										
<table border="1"> <tr><td>Connector No.</td><td>M89</td></tr> <tr><td>Connector Name</td><td>BACK-UP LAMP RELAY</td></tr> <tr><td>Connector Type</td><td>MS02FL-M2-LC</td></tr> </table> 	Connector No.	M89	Connector Name	BACK-UP LAMP RELAY	Connector Type	MS02FL-M2-LC	<table border="1"> <tr><td>Terminal No.</td><td>1</td></tr> <tr><td>Color of Wire</td><td>R</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>2</td></tr> <tr><td>Color of Wire</td><td>W</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>3</td></tr> <tr><td>Color of Wire</td><td>LG</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> <tr><td>Terminal No.</td><td>5</td></tr> <tr><td>Color of Wire</td><td>O</td></tr> <tr><td>Signal Name [Specification]</td><td></td></tr> </table>	Terminal No.	1	Color of Wire	R	Signal Name [Specification]		Terminal No.	2	Color of Wire	W	Signal Name [Specification]		Terminal No.	3	Color of Wire	LG	Signal Name [Specification]		Terminal No.	5	Color of Wire	O	Signal Name [Specification]													
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Color of Wire	O																																										
Signal Name [Specification]																																											

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# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

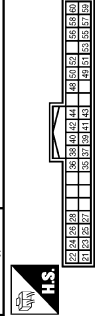
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M75
Connector Name	DISPLAY UNIT (WITH NAVI)
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	Y	BATTERY
3	LG	ACC
4	B	SHIELD
5	R	AUX IMAGE GND
6	B	RGB (G.GREEN) SIGNAL
7	SHIELD	SHIELD
8	R	HP
9	B	RGB AREA (YS) SIGNAL
10	L	COMM (CONT->DISP)
11	L	CAMERA IMAGE SIGNAL
12	W	

Connector No.	M87
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH04FW-NH

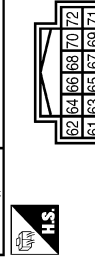


Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	V	ACC
26	G	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	R	MICROPHONE SIGNAL
36	G	IGNITION
36	SB	PARKING BRAKE
37	O	REVERSE

13	B	GND
14	SHIELD	SHIELD
15	G	AUX IMAGE SIGNAL
17	W	RGB (R.RED) SIGNAL
18	R	RGB (B.BLUE) SIGNAL
19	G	RGB SYNC
20	W	VP
21	SHIELD	SHIELD
22	P	COMM (DISP->CONT)
23	SHIELD	SHIELD

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	SOUND SIGNAL LH (+)
3	L	SOUND SIGNAL LH (-)
4	BR	VOICE GUIDANCE SIGNAL (+)
5	Y	VOICE GUIDANCE SIGNAL (-)
6	P	STRG SW A
7	GR	ACC
9	L	ILLUMINATION
10	B	SHIELD
11	R	SOUND SIGNAL RH (+)
12	G	SOUND SIGNAL RH (-)
15	B	STRG SW GND

Connector No.	M88
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
61	W	
62	B	RGB (R.RED) SIGNAL
63	R	RGB (G.GREEN) SIGNAL
64	SHIELD	RGB (B.BLUE) SIGNAL
65	G	SHIELD
66	SHIELD	RGB SYNC
67	B	SHIELD
68	R	RGB AREA (YS) SIGNAL
69	W	HP
70	L	COMM (CONT->DISP)
71	P	COMM (DISP->CONT)

16	L	STRG SW B
19	Y	BATTERY

72	SHIELD	SHIELD
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A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

AV

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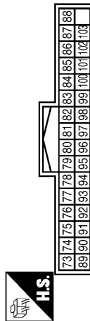
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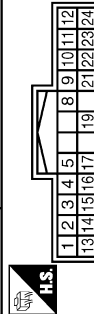
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M89
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	TH24FW-NH



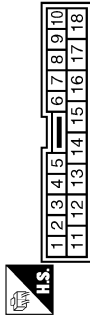
Terminal No.	Color of Wire	Signal Name [Specification]
79	R	iPod SOUND SIGNAL LH (+)
80	B	iPod SOUND SIGNAL RH (+)
81	SHIELD	SHIELD
85	SB	DISK EJECT SIGNAL
86	SHIELD	SHIELD
87	W	AUX SOUND SIGNAL LH (+)
88	B	AUX SOUND SIGNAL GND
95	W	iPod SOUND SIGNAL LH (-)
96	G	iPod SOUND SIGNAL RH (-)
102	BR	SW GND
103	R	AUX SOUND SIGNAL RH (+)

Connector No.	M111
Connector Name	iPod ADAPTER
Connector Type	TH24FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	iPod SOUND SIGNAL LH (+)
2	B	iPod SOUND SIGNAL RH (+)
3	V	ACC
4	R	AV COMM (L)
5	Y	BATTERY
8	W	CHARGE POWER
9	P	COMM (iPod ADAPTER->iPod)
10	L	COMM (iPod->iPod ADAPTER)
11	O	ACCESSORY IDENTIFY
12	W	iPod SOUND SIGNAL RH (+)
13	W	iPod SOUND SIGNAL LH (-)

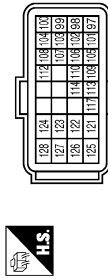
Connector No.	M106
Connector Name	WIRE TO WIRE
Connector Type	TK10MW-NSS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	- [With NAVI]
2	G	- [With NAVI]
3	SHIELD	- [With NAVI]

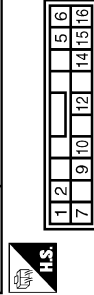
14	G	iPod SOUND SIGNAL RH (-)
15	SHIELD	SHIELD
16	G	AV COMM (H)
17	BR	GND
19	SHIELD	SHIELD
21	W	iPod CONNECTION RECOGNITION
22	G	ACCESSORY DETECT
23	R	iPod SOUND SIGNAL GND
24	B	iPod SOUND SIGNAL LH (+)

Connector No.	M107
Connector Name	ECM
Connector Type	RM24FGY-RZ6-R-LH-Z



Terminal No.	Color of Wire	Signal Name [Specification]
113	P	VEHCAN-LI
114	L	VEHCAN-HI

Connector No.	M112
Connector Name	iPod SIDE (WITH A/T)
Connector Type	IP16FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	W	iPod CONNECTION RECOGNITION
10	BR	GND
12	W	CHARGE POWER
14	SHIELD	SHIELD
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

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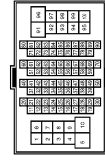
# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

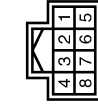
### BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MH-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
57	V	-
58	LG	-
60	L	-
61	O	-
62	GR	-
63	BR	-
64	P	-
65	SB	-
66	Y	-
92	P	-
97	L	-

Connector No.	M155
Connector Name	WIRE TO WIRE
Connector Type	TH08PW-NH



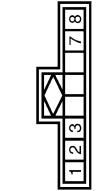
Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R	-
4	W	-
5	B	-
6	SHIELD	-
7	G	-
8	R	-

Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK38MW-NS/D



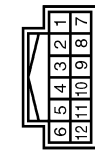
Terminal No.	Color of Wire	Signal Name [Specification]
30	LG	-
31	W	-
41	O	-

Connector No.	M154
Connector Name	AUXILIARY INPUT JACKS (WITH A/T)
Connector Type	A08PW



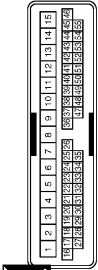
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	AUX SOUND SIGNAL RH (+)
2	B	AUX SOUND SIGNAL GND
3	W	AUX SOUND SIGNAL LH (+)
7	G	AUX IMAGE SIGNAL
8	R	AUX IMAGE GND

Connector No.	M114
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



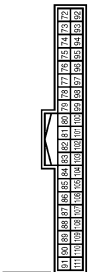
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	O	-
4	SHIELD	-
5	W	-
6	B	-
7	R	-
8	BR	-
9	W	-
10	W	-
11	SHIELD	-

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color of Wire	Signal Name [Specification]
7	R	-
8	G	-
11	SB	-
12	BR	-

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH08FB-NH



Terminal No.	Color of Wire	Signal Name [Specification]
90	P	CAN-L
91	L	CAN-H

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A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P



# CAMERA CONTROL UNIT

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[BOSE AUDIO WITH NAVIGATION]

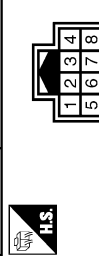
## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M181
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	G	
3	O	
4	SHIELD	
5	W	
6	B	
7	R	
8	BR	
9	W	
10	L	
11	SHIELD	

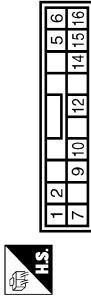
Connector No.	M381
Connector Name	WIRE TO WIRE
Connector Type	TH10BMW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R	
4	W	
5	SHIELD	
6	SHIELD	
7	G	
8	R	

12	P	-
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Connector No.	M182
Connector Name	iPod SIDE (WITH M/T)
Connector Type	IP16FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	iPod SOUND SIGNAL LH (+)
2	R	iPod SOUND SIGNAL GND
5	L	COMM (iPod->iPod ADAPTER)
6	P	COMM (iPod ADAPTER->iPod)
7	W	iPod SOUND SIGNAL RH (+)
9	L	iPod CONNECTION RECOGNITION GND
10	BR	
12	W	CHARGE POWER
14	SHIELD	
15	G	ACCESSORY DETECT
16	O	ACCESSORY IDENTIFY

Connector No.	M371
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	GT13S1F-2/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
106	-	AM-FM MAIN
107	-	ANTENNA AMP. ON SIGNAL

Connector No.	M303
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
14	-	
15	-	
17	-	

Connector No.	M372
Connector Name	AV CONTROL UNIT (WITH NAVI)
Connector Type	FAKRA JACK



Terminal No.	Color of Wire	Signal Name [Specification]
108	-	SATELLITE ANTENNA
109	-	SHIELD

















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# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

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Connector No.	M373																																																														
Connector Name	AV CONTROL UNIT (WITH NAVI)																																																														
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Terminal No.	110	111																																																													
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JCNWA2454GB

# CAMERA CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AUDIO WITH NAVIGATION SYSTEM

Connector No.	M382
Connector Name	WIRE TO WIRE
Connector Type	FAKRA



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	M383
Connector Name	ANTENNA BASE
Connector Type	FAKRA



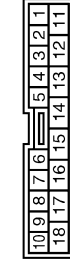
Terminal No.	Color of Wire	Signal Name [Specification]
3	--	SATELLITE ANTENNA
4	--	SHIELD

Connector No.	M385
Connector Name	WIRE TO WIRE
Connector Type	GT13SS-1/1S-HU



Terminal No.	Color of Wire	Signal Name [Specification]
1	--	--
2	--	--

Connector No.	R1
Connector Name	WIRE TO WIRE
Connector Type	TKGFW-NS8



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-- [With NAVI]
2	G	-- [With NAVI]
3	SHIELD	--

Connector No.	R7
Connector Name	MICROPHONE
Connector Type	TKGFW



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	MICROPHONE SIGNAL [With NAVI]
2	SHIELD	MICROPHONE GND
4	W	MICROPHONE VCC [With NAVI]

JCNWA2455GB

# MULTI AV SYSTEM SYMPTOMS

[BOSE AUDIO WITH NAVIGATION]

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

### MULTI AV SYSTEM SYMPTOMS

#### Symptom Table

INFOID:000000004371865

#### RELATED TO NAVIGATION

#### Trouble Diagnosis Chart by Symptom

Symptoms	Check items	Possible malfunction location / Action to take
Multifunction switch and preset switch operation does not work.	<ul style="list-style-type: none"> <li>All switches cannot be operated.</li> <li>"MULTI AV" is displayed on system selection screen when the CONSULT-III is started.</li> </ul>	<ul style="list-style-type: none"> <li>Multifunction switch power supply and ground circuit.</li> <li>AV communication circuit between AV control unit and multifunction switch.</li> </ul> Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-519, "CONSULT - III Function (MULTI AV)"</a> .
	<ul style="list-style-type: none"> <li>All switches cannot be operated.</li> <li>"MULTI AV" is not displayed on system selection screen when the CONSULT-III is initialized.</li> </ul>	AV control unit power supply and ground circuit malfunction. Refer to <a href="#">AV-565, "AV CONTROL UNIT : Diagnosis Procedure"</a> .
	Only specified switch cannot be operated.	Multifunction switch or preset switch malfunction. Perform multifunction switch and preset switch self-diagnosis function. Refer to <a href="#">AV-502, "Diagnosis Description"</a> .
Fuel economy display, vehicle setting operation is abnormal.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform detected DTC self-diagnosis. Refer to <a href="#">AV-519, "CONSULT - III Function (MULTI AV)"</a> .
	There is no malfunction in the self-diagnosis results.	Ignition signal circuit malfunction. Refer to <a href="#">AV-565, "AV CONTROL UNIT : Diagnosis Procedure"</a> .
Guide sound is not heard or too low.	On the setting display select "system sound (guide sound volume, etc.)," and confirm that guide sound is ON.	Voice guidance signal circuit malfunction.

#### RELATED TO HANDS-FREE PHONE

- Check that the cellular phone is corresponding type (Bluetooth™ correspond) when the hands-free related malfunction vehicle is in service before performing a diagnosis.
- There is a case that malfunction occurs due to the version change of the phone type, etc. even though it is a corresponding type. Therefore, confirm it by changing the cellular phone to another corresponding type phone, and check that it operates normally. It is necessary to distinguish whether the cause is the vehicle or cellular phone.

#### Simple Check for Bluetooth™ Communication

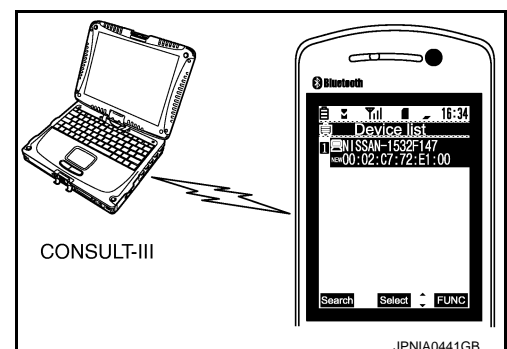
If cellular phone and AV control unit cannot be connected with Bluetooth™ communication, following procedure allows the technician to judge which device has malfunction.

- Turn on a cellular phone, not connecting Bluetooth™ communication.
- Start CONSULT-III, then start Windows™.
- Set CONSULT-III near a cellular phone.
- When operated Bluetooth™ registration by cellular phone, check if CONSULT-III\* would be displayed on the device name. (If other Bluetooth™ device is located near cellular phone, a name of the device would be displayed also.)

**NOTE:**

\*:Displayed device name is "NISSAN-\*\*\*\*\*".

- If no device name is displayed, cellular phone is malfunctioning. Repair the cellular phone first, then perform diagnosis.
- If CONSULT-III is displayed on device name, cellular phone is normal. Perform diagnosis as per the following table.



## MULTI AV SYSTEM SYMPTOMS

**[BOSE AUDIO WITH NAVIGATION]**

< SYMPTOM DIAGNOSIS >

### Trouble Diagnosis Chart by Symptom

Symptoms	Check items	Probable malfunction location
Does not recognize cellular phone connection. (no connection is displayed on the display at the guide.)	Repeat the registration of cellular phone.	AV control unit malfunction. Replace AV control unit. Refer to <a href="#">AV-738, "Exploded View"</a> .
Hands-free phone cannot be established.	<ul style="list-style-type: none"> <li>Hands-free phone operation can be made, but the communication cannot be established.</li> <li>Hands-free phone operation can be performed, however, voice between each other cannot be heard during the conversation.</li> </ul>	AV control unit malfunction. Replace AV control unit. Refer to <a href="#">AV-738, "Exploded View"</a> .
The other party's voice cannot be heard by hands-free phone.	Check the "microphone speaker" in Inspection & Adjustment Mode if sound is heard.	AV control unit malfunction. Replace AV control unit. Refer to <a href="#">AV-738, "Exploded View"</a> .
	Check the "microphone speaker" in Inspection & Adjustment Mode if sound is not heard.	AV control unit malfunction. Replace AV control unit. Refer to <a href="#">AV-738, "Exploded View"</a> .
Originating sound is not heard by the other party with hands-free phone communication.	Sound operation function is normal.	AV control unit malfunction. Replace AV control unit. Refer to <a href="#">AV-738, "Exploded View"</a> .
	Sound operation function does not work.	Microphone signal circuit malfunction. Refer to <a href="#">AV-578, "Diagnosis Procedure"</a> .
The system cannot be operated.	<ul style="list-style-type: none"> <li>The retractable hard top is fully closed.</li> <li>The voice recognition cannot be controlled.</li> </ul>	Roof status signal circuit malfunction. Refer to Roof section. Refer to <a href="#">RF-8, "Work Flow"</a> .
	<ul style="list-style-type: none"> <li>The retractable hard top is fully closed.</li> <li>The voice recognition can be controlled.</li> <li>Steering switch's "VOL UP", "VOL DOWN", "↶" switch works, but "↷" it does not work.</li> </ul>	Steering switch malfunction. Refer to <a href="#">AV-751, "Exploded View"</a> .
	<ul style="list-style-type: none"> <li>The retractable hard top is fully closed.</li> <li>The voice recognition can be controlled.</li> <li>Steering switch's "↷", "VOL UP", "VOL DOWN", "↶" switches do not work.</li> </ul>	Steering switch signal B circuit malfunction. Refer to <a href="#">AV-589, "Diagnosis Procedure"</a> .
	All steering switches do not work.	Steering switch signal GND circuit malfunction. Refer to <a href="#">AV-591, "Diagnosis Procedure"</a> .

### RELATED TO CAMERA

#### Trouble Diagnosis Chart by Symptom

Symptoms	Check items	Probable malfunction location
Camera image is not displayed (displayed in black and nothing can be displayed)	AUX image is not displayed.	<ul style="list-style-type: none"> <li>Horizontal synchronizing (HP) signal circuit malfunction between AV control unit and display unit. Refer to <a href="#">AV-574, "Diagnosis Procedure"</a>.</li> <li>Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit. Refer to <a href="#">AV-575, "Diagnosis Procedure"</a>.</li> </ul>
Camera image is not shown. (Vehicle width and possible route line is displayed.)	—	Camera image signal circuit between camera control unit and rear view camera. Refer to <a href="#">AV-580, "Diagnosis Procedure"</a> .

# MULTI AV SYSTEM SYMPTOMS

[BOSE AUDIO WITH NAVIGATION]

< SYMPTOM DIAGNOSIS >

Symptoms	Check items	Probable malfunction location	
Camera image is not displayed. (Only warning message under area is displayed.)	There is malfunction in the CONSULT-III self-diagnosis result.	Perform detected DTC self-diagnosis. Refer to <a href="#">AV-519, "CONSULT - III Function (MULTI AV)".</a>	A
	AUX image is normal.	Camera image signal circuit malfunction between camera control unit and display unit. Refer to <a href="#">AV-582, "Diagnosis Procedure".</a>	B
	AUX image is not displayed.	RGB area (YS) signal circuit malfunction between AV control unit and display unit. Refer to <a href="#">AV-573, "Diagnosis Procedure".</a>	C
	Select "Camera Cont." of confirmation/Adjustment mode, Reverse Sensor is not turned ON at "Connection Confirmation".	Reverse signal circuit malfunction (camera control unit).	D
CAMERA image is rolling.	AUX image is also rolling.	Vertical synchronizing (VP) signal circuit malfunction between AV control unit and display unit. Refer to <a href="#">AV-575, "Diagnosis Procedure".</a>	E
Camera image does not switch.	Malfunction of self-diagnosis result is indicated.	Camera connection recognition signal circuit malfunction.	F
	Malfunction of self-diagnosis result is not indicated.	Reverse signal circuit malfunction (AV control unit).	
Possible route line is indicated abnormally when camera image is displayed.	"Steer. Angle Sensor" turns ON at "Confirmation/Adjustment" of on board diagnosis item "Camera Cont." turns ON.	Sensor signal 3 circuit malfunction. Refer to <a href="#">AV-585, "Diagnosis Procedure".</a>	G
	"Steer. Angle Sensor" turns ON at "Confirmation/Adjustment" of on board diagnosis item "Camera Cont." does not turns ON.	<ul style="list-style-type: none"> <li>Sensor signal 1 circuit. Refer to <a href="#">AV-583, "Diagnosis Procedure".</a></li> <li>Sensor signal 2 circuit. Refer to <a href="#">AV-583, "Diagnosis Procedure".</a></li> </ul>	H

## RELATED TO RGB IMAGE

Trouble Diagnosis Chart by Symptom

Symptoms	Check items	Possible malfunction location / Action to take	
RGB image is not shown.	<ul style="list-style-type: none"> <li>All RGB images are not shown.</li> <li>"MULTI AV" is displayed on system selection screen when the CONSULT-III is started.</li> </ul>	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-519, "CONSULT - III Function (MULTI AV)".</a>	K
	<ul style="list-style-type: none"> <li>All RGB images are not shown.</li> <li>"MULTI AV" is not displayed on system selection screen when the CONSULT-III is started.</li> </ul>	AV control unit power supply and ground circuit malfunction. Refer to <a href="#">AV-565, "AV CONTROL UNIT : Diagnosis Procedure".</a>	L
Color of RGB image is not proper.	Light blue (Cyan) tint.	RGB signal (R: red) circuit malfunction between AV control unit and display unit. Refer to <a href="#">AV-569, "Diagnosis Procedure".</a>	M
	Purple (Magenta) tint.	RGB signal (G: green) circuit malfunction between AV control unit and display unit. Refer to <a href="#">AV-570, "Diagnosis Procedure".</a>	AV
	Screen looks yellowish.	RGB signal (B: blue) circuit malfunction between AV control unit and display unit. Refer to <a href="#">AV-571, "Diagnosis Procedure".</a>	O
RGB screen is rolling.	—	RGB synchronizing signal circuit malfunction between AV control unit and display unit. Refer to <a href="#">AV-572, "Diagnosis Procedure".</a>	P

## RELATED TO VOICE CONTROL

Trouble Diagnosis Chart by Symptom

# MULTI AV SYSTEM SYMPTOMS

[BOSE AUDIO WITH NAVIGATION]

< SYMPTOM DIAGNOSIS >

Symptoms	Check items	Probable malfunction location
The voice cannot be controlled even if the voice control screen is displayed.	Voice sounds at "Voice Microphone Test" of Confirmation/Adjustment mode.	AV control unit malfunction. Replace AV control unit. Refer to <a href="#">AV-738, "Exploded View"</a> .
	Voice does not sound at "Voice Microphone Test" of Confirmation/Adjustment mode.	Microphone circuit malfunction. Refer to <a href="#">AV-578, "Diagnosis Procedure"</a> .
The voice cannot be controlled (Voice control screen is not displayed).	<ul style="list-style-type: none"> <li>Steering switch's "SOURCE", "MENU UP", "MENU DOWN", "ENTER" switch works, but "↵" it does not work.</li> <li>Hands-free phone system cannot be operated.</li> </ul>	Roof status signal circuit malfunction. Refer to Roof section. Refer to <a href="#">RF-8, "Work Flow"</a> .
	<ul style="list-style-type: none"> <li>Steering switch's "SOURCE", "MENU UP", "MENU DOWN", "ENTER" switch works, but "↵" it does not work.</li> <li>Hands-free phone system can be operated.</li> </ul>	Steering switch malfunction. Replace steering switch. Refer to <a href="#">AV-751, "Exploded View"</a> .
	Steering switch's "SOURCE", "MENU UP", "MENU DOWN", "↵", "ENTER" switches do not work.	Steering switch signal A circuit malfunction. Refer to <a href="#">AV-587, "Diagnosis Procedure"</a> .
	All steering switches do not work.	Steering switch signal GND circuit malfunction. Refer to <a href="#">AV-591, "Diagnosis Procedure"</a> .

## RELATED TO AUDIO

### Trouble Diagnosis Chart by Symptom

Symptoms	Check items	Possible malfunction location / Action to take
The CD cannot be removed.	—	Disk eject signal circuit malfunction between AV control unit and preset switch. Refer to <a href="#">AV-577, "Diagnosis Procedure"</a> .
Audio sound is not heard.	No sound from all speakers.	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-519, "CONSULT - III Function (MULTI AV)"</a> .
	Sound is heard only from specific places (RH front, RH rear, LH front and LH rear).	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-519, "CONSULT - III Function (MULTI AV)"</a> .
Satellite radio is not received.	There is malfunction in the CONSULT-III self-diagnosis result.	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-519, "CONSULT - III Function (MULTI AV)"</a> .
	There is no malfunction in the CONSULT-III self-diagnosis result.	Perform the following inspection procedure. 1. Check satellite radio antenna (antenna base) mounting nut for looseness. <b>NOTE:</b> Tightening torque: 6.5 N·m (0.66 kg·m, 58 in·lb) 2. Visually check for satellite radio antenna feeder. 3. Replace the satellite radio antenna (antenna base). Refer to <a href="#">AV-748, "Exploded View"</a> . 4. Replace the AV control unit. Refer to <a href="#">AV-738, "Exploded View"</a> .
AM/FM radio is not received.	Other audio sounds are normal.	<ul style="list-style-type: none"> <li>Antenna amp. ON signal circuit.</li> <li>Antenna feeder.</li> </ul>
Sound equalizer is not switched.	—	Roof status signal (audio) circuit malfunction.

## RELATED TO iPod®

### Trouble Diagnosis Chart by Symptom

Connect another iPod® and check if the symptom is reproduced or not. If the symptom is reproduced, diagnose the vehicle. If no malfunction is detected, replace the iPod harness.

iPod® is a trademark of Apple inc., registered in the U.S. and other countries.



# MULTI AV SYSTEM SYMPTOMS

[BOSE AUDIO WITH NAVIGATION]

< SYMPTOM DIAGNOSIS >

**NOTE:**

- It is unable to check that between iPod® and iPod harness.
- The iPod Touch and iPod Classic may not charge properly in some cases.
- As for iPod released concurrently with and after iPhone 3G (iPod Touch, iPod Nano 4th generation, iPod Classic 2nd generation, etc.) , 12 V charging circuit is deleted from iPod®.

Symptoms	Check items	Possible malfunction location / Action to take
The sound of iPod® is not heard.	Other audio sounds are normal.	<ul style="list-style-type: none"> <li>• iPod sound signal circuit between AV control unit and iPod adapter.</li> <li>• iPod sound signal circuit between iPod® and iPod adapter.</li> </ul>
It does not change to iPod mode.	There is malfunction in the CONSULT-III self-diagnosis.	Perform CONSULT-III self-diagnosis. Refer to <a href="#">AV-519, "CONSULT - III Function (MULTI AV)".</a>
"iPod is not connected" is displayed when it comes to iPod mode.	Connected to iPod®.	iPod connection recognition signal circuit between iPod® and iPod adapter.
iPod® cannot charge the battery.	Not chargeable even when connecting other iPod®. Refer to above.	iPod battery charge circuit between iPod® and iPod adapter.
The title of music file in the iPod® is not indicated.	—	Communication circuit between iPod® and iPod adapter.
Accessing the iPod® is unavailable from the vehicle.		

## RELATED TO STEERING SWITCH

### Trouble Diagnosis Chart by Symptom

Symptoms	Probable malfunction location
None of the steering switch operations work.	Steering switch signal GND circuit malfunction. Refer to <a href="#">AV-591, "Diagnosis Procedure".</a>
Only specified switch cannot be operated.	Steering switch malfunction. Refer to <a href="#">AV-751, "Exploded View".</a>
Steering switch's "SOURCE", "MENU UP", "MENU DOWN", "↖", "ENTER" switches do not work.	Steering switch signal A circuit malfunction. Refer to <a href="#">AV-587, "Diagnosis Procedure".</a>
Steering switch's "↗", "VOL UP", "VOL DOWN", "↶" switches do not work.	Steering switch signal B circuit malfunction. Refer to <a href="#">AV-589, "Diagnosis Procedure".</a>

## RELATED TO AUXILIARY INPUT

**NOTE:**

Check that there is no malfunction of AUX equipment main body before performing a diagnosis.

### Trouble diagnosis chart by symptom

Symptoms	Check items	Probable malfunction location
No voice sound is heard when AUX mode is selected.	Voice sound is heard when other modes are selected.	AUX sound signal circuit (auxiliary input jacks to AV control unit).
Image is not displayed when AUX mode is selected.	Camera image is displayed.	AUX image signal circuit malfunction. Refer to <a href="#">AV-576, "Diagnosis Procedure".</a>

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# NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

## NORMAL OPERATING CONDITION

### Description

INFOID:000000004371866

**NOTE:**

For Navigation system operation information, refer to Navigation system Owner's Manual.

### BASIC OPERATIONS




Symptom	Possible cause	Possible solution
No image is displayed.	The brightness is at the lowest setting.	Adjust the brightness of the display.
	The systems in the video mode.	Push <DISC-AUX> to change the mode.
	The display is turned off.	Push <Day/Night> to turn on the display.
Screen not clear.	Contrast setting is not appropriate.	Adjust the contrast of the display.
No voice guidance is available. Or The volume is too high or too low.	The volume is not set correctly, or it is turned off.	Adjust the volume of voice guidance.
	Voice guidance is not provided for certain streets (roads displayed in gray).	This is not a malfunction.
No map is displayed on the screen.	A screen other than map screen is displayed.	Push <MAP>.
The screen is too dim. The movement is slow.	The temperature in the interior of the vehicle is low.	Wait until the interior of the vehicle has warmed up.
Some pixels in the display are darker or brighter than others.	This condition is an inherent characteristic of liquid crystal displays.	This is not a malfunction.
Some menu items cannot be selected.	Some menu items become unavailable while the vehicle is driven.	Park the vehicle in a safe location, and then operate the navigation system.

**NOTE:**

Locations stored in the Address Book and other memory functions may be lost if the vehicle's battery is disconnected or becomes discharged. If this occurs, service the vehicle's battery as necessary and re-enter the information in the Address Book.

### RELATED TO VOICE RECOGNITION

Related to basic operation

Symptom	Possible cause	Possible solution
The system does not recognize your command. or The system recognizes your command incorrectly	The interior of the vehicle is too noisy.	Close the windows or have other occupants quiet.
	The volume of your voice is too low.	Speak louder.
	The volume if your voice is too loud.	Speak softer.
	Your pronunciation is unclear.	Speak clearly.
	You are speaking before the voice recognition is ready	Push and release “  ” switch on the steering switch, and speak a command after the tone sounds.
	8 seconds or more have passed after you pushed and released “  ” switch on the steering switch.	Make sure to speak a command within 8 seconds after you push and release “  ” switch on the steering switch.
	Only a limited range of voice commands is usable for each screen.	Use a correct voice command appropriate for the current screen.
	The fan of the air conditioner is too loud.	If the air conditioner is set to “Auto”, the fan speed is automatically lowered and voice commands can be recognized more easily. Lower the fan speed as necessary or set the air conditioner to “Auto”.
The system cannot be operated.	The retractable hard top is open.	<ul style="list-style-type: none"> <li>• Close the retractable hard top.</li> <li>• Open and close the retractable hard top before operating the system.</li> </ul>

## NORMAL OPERATING CONDITION

[BOSE AUDIO WITH NAVIGATION]

### < SYMPTOM DIAGNOSIS >

Related to item choice

The system should respond correctly to all voice commands without difficulty. If problems are encountered, follow the solutions given in this guide for the appropriate error.

Where the solutions are listed by number, try each solution in turn, starting with number one, until the problem is resolved.

Symptom/ error message	Solution
Displays "COMMAND NOT RECOGNIZED" or the system fails to interpret the command correctly.	1. Ensure that the command format is valid.
	2. Speak clearly without pausing between words and at a level appropriate to the ambient noise level.
	3. Ensure that the ambient noise level is not excessive, for example, windows open or defrost on. <b>NOTE:</b> If it is too noisy to use the phone, it is likely that voice commands will not be recognized.
	4. If optional words of the command have been omitted, then command should be tried with these in place.
The system consistently selects the wrong voicetag	1. Ensure that the voicetag requested matches what was originally stored. This can be confirmed by giving the "Addressbook" Directory or Phone Directory command.
	2. Replace one of the voicetags being confused with a different voicetag.

Related to telephone

The system should respond correctly to all voice commands without difficulty. If problems are encountered, try the following solutions.

Where the solutions are listed by number, try each solution in turn, starting with number 1, until the problem is resolved.

Symptom	Solution
System fails to interpret the command correctly.	1. Ensure that the command is valid.
	2. Ensure that the command is spoken after the tone.
	3. Speak clearly without pausing between words and at level appropriate to the ambient noise level in the vehicle.
	4. Ensure that the ambient noise level is not excessive (for example, windows open or defroster on). <b>NOTE:</b> If it is too noisy to use the phone, it is likely that the voice commands will not be recognized.
	5. If more than one command was said at a time, try saying the commands separately.
	6. If the system consistently fails to recognize commands, the voice training procedure should be carried out to improve the recognition response for the speaker. See "Speaker adaptation (SA) mode" earlier in this section. Refer to "OWNER'S MANUAL".
The system consistently selects the wrong voicetag	1. Ensure that the phone book entry name requested matches what was originally stored. This can be confirmed by highlighting the name of the entry name in Phone menu.
	2. Replace one of the names being confused with a new name.

### RELATED TO AUDIO

- The majority of the audio malfunctions are the result of outside causes (bad CD/cassette, electromagnetic interference, etc.). Check the symptoms below to diagnose the malfunction.
- The vehicle itself can be a source of noise if noise prevention parts or electrical equipment is malfunctioning. Check if noise is caused and/or changed by engine speed, ignition switch turned to each position, and operation of each piece of electrical equipment, and then determine the cause.

**NOTE:**

- CD-R is not guaranteed to play because they can contain compressed audio (MP3, WMA) or could be incorrectly mastered by the customer on a computer.
- Check if the CDs carry the Compact Disc Logo. If not, the disc is not mastered to the "red book" Compact Disc Standard and may not play.

## NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Symptom	Cause and Counter measure
Cannot play	Check if the CD/CF was inserted correctly.
	Check if the CD/CF is scratched or dirty.
	Check if there is condensation inside the player, and if there is, wait until the condensation is gone (about 1 hour) before using the player.
	If there is a temperature increase error, the player will play correctly after it returns to the normal temperature.
	If there is a mixture of music CD files (CD-DA data) and MP3/WMA files on a CD, only the music CD files (CD-DA data) will be played.
	Files with extensions other than “.MP3”, “.WMA”, “.mp3”, or “.wma” cannot be played. In addition, the character codes and number of characters for folder names and file names should be in compliance with the specifications.
	Check if the disc or the file is generated in an irregular format, This may occur depending on the variation or the setting of MP3/WMA writing applications or other text editing applications.
Poor sound quality	Check if the CD/CF is scratched or dirty.
	If there are many folder or file levels on the MP3/WMA CD/CF, or if it is a multisession disc, some time may be required before the music starts playing.
	The writing software and hardware combination might not match, or the writing speed, writing depth, writing width might not match the specifications. Try using the slowest writing speed.
	Skipping may occur with large quantities if data such as for high bit rate data.
Music cuts off or skips	When a non-MP3/WMA file has been given an extension of “.MP3”, “.WMA”, “.mp3”, or “.wma”, or when play is prohibited by copyright protection, the player will skip to the next song.
Skipping with high bit rate files	The playback order is the order in which the files were written by the software, so the files might not play in the desired order.
Move immediately to the next song when playing	
The songs do not play back in the desired order.	

Noise resulting from variations in field strength, such as fading noise and multi-path noise, or external noise from trains and other sources, is not a malfunction.

**NOTE:**

- Fading noise: This noise occurs because of variations in the field strength in a narrow range due to mountains or buildings blocking the signal.
- Multi-path noise: This noise results from a time difference between the broadcast waves directly from the station arriving at the antenna and the waves reflected by mountains or buildings.

### RELATED TO VEHICLE ICON

Symptom	Possible cause	Possible solution
Names of roads differ between Plan View and Birdview™.	This is because the quantity of the displayed information is reduced so that the screen does not become too crowded. There is also a chance that names of the roads may be displayed multiple times, and the names appearing on the screen may be different because of a processing procedure.	This is not a malfunction.
The vehicle icon is not displayed in the correct position.	The vehicle was transported after the ignition switch was pushed off, for example, by a ferry or car transporter.	Drive the vehicle for a while on a road where GPS signals can be received.
	The position and direction of the vehicle icon may be incorrect depending on the driving environments and the levels of positioning accuracy of the navigation system.	This is not a malfunction. Drive the vehicle for a while to automatically correct the position and direction of the vehicle icon.
When the vehicle is traveling on a new road, the vehicle icon is located on another road nearby.	Because the new road is not stored in the map data, the system automatically places the vehicle icon on the nearest road available.	Updated road information will be included in the next version of the map data.

## NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Symptom	Possible cause	Possible solution
The screen does not switch to the night screen even after turning on the headlights.	The daytime screen was set the last time the headlights were turned on.	Set the screen to the night screen mode using <Day/Night> when you turn on the headlights.
The map does not scroll even when the vehicle is moving.	The current location map screen is not displayed.	Push <MAP>.
The vehicle icon is not displayed.	The current location map screen is not displayed.	Push <MAP>.
The location of the vehicle icon is misaligned from the actual position.	When using tire chains or replacing the tires, speed calculations based on the speed sensor may be incorrect.	Drive the vehicle for a while (at approximately 19 MPH for about 30 minutes) to automatically correct the vehicle icon position. If this does not correct the vehicle icon position, contact an INFINITI dealer.
	The map data has a mistake or is incomplete (the vehicle icon position is always misaligned in the same area).	Updated road information will be included in the next version of the map data.

### RELATED TO ROUTE CALCULATION AND VISUAL GUIDANCE

Symptom	Possible cause	Possible solution
Waypoints are not included in the auto reroute calculation.	Waypoints that you have already passed are not included in the auto reroute calculation.	If you want to go to that waypoint again, you need to edit the route.
Route information is not displayed.	Route calculation has not yet been performed.	Set the destination and perform route calculation.
	You are not driving on the suggested route.	Drive on the suggested route.
	Route guidance is set to off.	Turn on route guidance.
	Route information is not provided for certain types of roads (roads displayed in gray).	This is not a malfunction.
The auto reroute calculation (or detour calculation) suggests the same route as the one previously suggested.	Route calculations took priority conditions into consideration, but the same route was calculated.	This is not a malfunction.
A waypoint cannot be added.	Five waypoints are already set on the route, including ones that you have already passed.	A maximum of 5 waypoints can be set on the route. If you want to go to 6 or more waypoints, perform route calculations multiple times as necessary.
The suggested route is not displayed.	Roads near the destination cannot be calculated.	Reset the destination to a main or ordinary road, and recalculate the route.
	The starting point and destination are too close.	Set a more distant destination.
	The starting point and destination are too far away.	Divide your trip by selecting one or two intermediate destinations, and perform route calculations multiple times.
	There are time restricted roads (by the day of the week, by time) near the current vehicle location or destination.	Set [Use Time Restricted Roads] to off.
The part of the route that you have already passed is deleted.	A route is managed by sections between waypoints. If you passed the first waypoint, the section between the starting point and the waypoint is deleted. (It may not be deleted depending on the area.)	This is not a malfunction.
An indirect route is suggested.	If there are restrictions (such as one-way streets) on roads close to the starting point or destination, the system may suggest an indirect route.	Adjust the location of the starting of the starting point or destination.
	The system may suggest an indirect route because route calculation does not take into consideration some areas such as narrow streets (gray roads.)	Reset the destination to a main or ordinary road, and recalculate the route.

## NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[BOSE AUDIO WITH NAVIGATION]

Symptom	Possible cause	Possible solution
The landmark information does not correspond to the actual information.	This may be caused by insufficient or incorrect map data.	Updated information will be included in the next version of the data.
The suggested route does not exactly connect to the starting point, waypoints, or destination.	There is no data for route calculation closes to these locations.	Set the starting point, waypoints and destination on a main road, and perform route calculation.

### RELATED TO VOICE GUIDANCE

Symptom	Possible cause	Possible solution
Voice guidance is not available	Voice guidance is only available at certain intersections marked with? In some case, voice guidance is not available even when the vehicle should make a turn.	This is not a malfunction.
	The vehicle has deviated from the suggested route.	Go back to the suggested route or request route calculation again
	Voice guide is set to off.	Turn on voice guidance.
	Route guidance is set to off.	Turn on voice guidance.
The guidance contact does not correspond to the actual condition.	The contact of voice guidance may vary, depending on the types of intersections at which turn are made.	Follow all traffic rules and regulations.

### RELATED TO TRAFFIC INFORMATION

Symptom	Possible cause	Possible solution
The traffic information is not displayed	The traffic information is not set to on.	Set the traffic information to on.
	You are in an area where traffic information is not available	Scroll to an area where traffic information is available
	You have not subscribed to XM NavTraffic or, your subscription to XM NavTraffic has expired.	Check your subscription status of XM NavTraffic.
	The map scale is set at a level where the display of icons is impossible.	Check that the map scale is set at a level in which the display of icons is possible.
With the automatic detour route search ON, no detour route is set to avoid congested areas.	There is no faster route compared to the current route, based on the road network and traffic information.	The automatic detour search is not intended for avoiding traffic jams. It searches for the fastest route taking into consideration such things as traffic jams.
The route does not avoid road section with traffic information stating it is closed due to road construction.	The navigation system is designed not to avoid this event because the actual period of closure may differ from the declared roadwork period.	Observe the actual road condition and follow the instructions on road for detour when necessary. If the road closure is for certain, use detour function and set the detour distance to avoid the closed road section.
Traffic information displayed differs from information from other media (e.g. radio).	Other media may use different information sources.	Observe the actual road conditions and regulations. Always observe safe driving practices and follow all traffic regulations.

PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000005156455

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

**WARNING:**

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIR BAG".
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

**WARNING:**

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

Precaution for Battery Service

INFOID:000000005156458

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

Service Procedure Precautions for Models with a Pop-up Roll Bar

INFOID:000000005156456

**WARNING:**

- Risk of passenger injury or death may increase if the pop-up roll bar does not deploy during a roll over collision. In order to reduce the chance of an incident where the pop-up roll bar is inoperative, all maintenance must be performed by a NISSAN or INFINITI dealer.
- Before removing and installing the pop-up roll bar component parts and harness, always turn the ignition switch OFF, disconnect the battery negative terminal, and wait for 3 minutes or more. (The purpose of this operation is to discharge electricity that is accumulated in the auxiliary power supply circuit in the air bag diagnosis sensor unit.)
- When repairing, removing, and installing a pop-up roll bar, always refer to SRS AIR BAG and SRS AIR BAG CONTROL warnings in the Service Manual.

Precaution for Trouble Diagnosis

INFOID:000000004371868

AV COMMUNICATION SYSTEM

- Do not apply voltage of 7.0 V or higher to the measurement terminals.
- Use the tester with its open terminal voltage being 7.0 V or less.
- Be sure to turn ignition switch OFF and disconnect the battery cable from the negative terminal before checking the circuit.

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# PRECAUTIONS

< PRECAUTION >

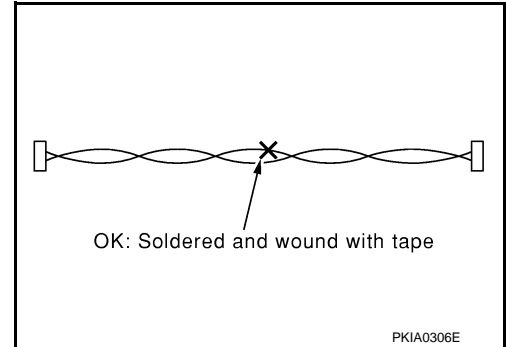
[BOSE AUDIO WITH NAVIGATION]

## Precaution for Harness Repair

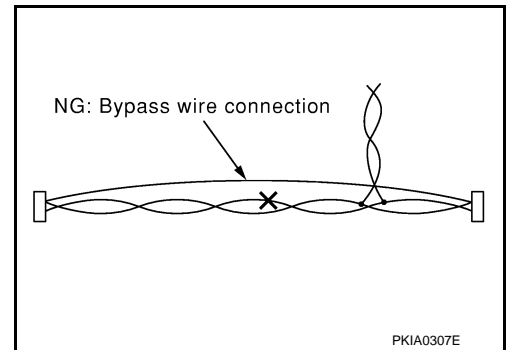
INFOID:000000004371869

### AV COMMUNICATION SYSTEM

- Solder the repaired parts, and wrap with tape. [Frays of twisted line must be within 110 mm (4.33 in).]



- Do not perform bypass wire connections for the repair parts. (The spliced wire will become separated and the characteristics of twisted line will be lost.)





# PREPARATION

< PREPARATION >

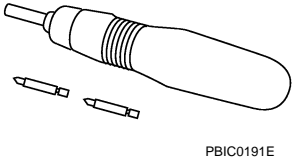
[BOSE AUDIO WITH NAVIGATION]

## PREPARATION

### PREPARATION

#### Commercial Service Tools

INFOID:000000004371870

Tool name	Description
<p>Power tool</p>  <p>PBIC0191E</p>	<p>Loosening bolts and nuts</p>

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# AV CONTROL UNIT

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## REMOVAL AND INSTALLATION

### AV CONTROL UNIT

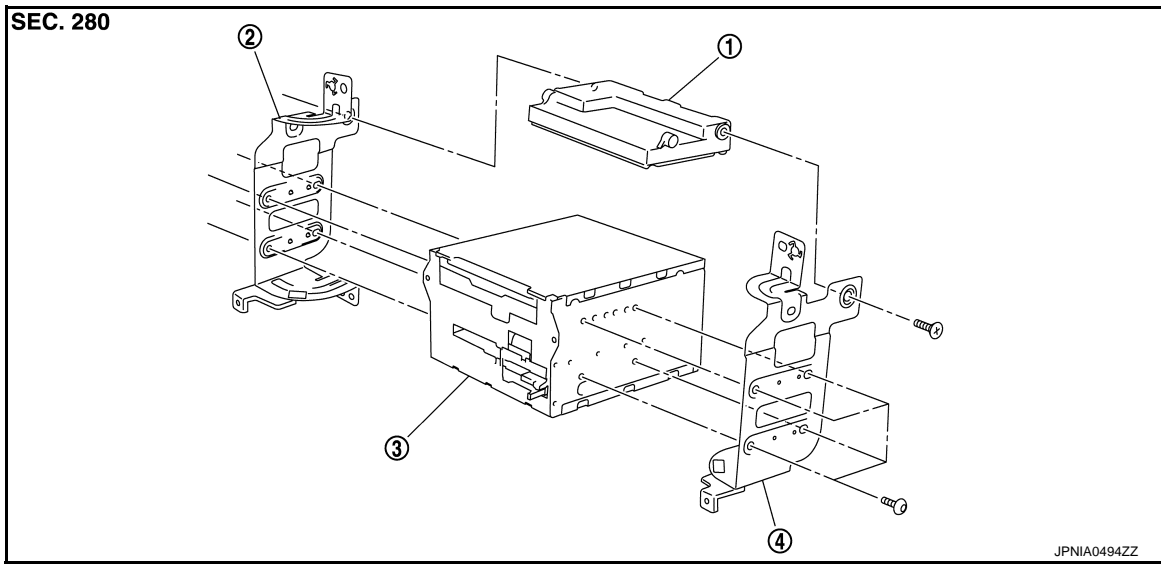
#### Exploded View

INFOID:000000004371871

#### REMOVAL

Refer to [IP-12, "Exploded View"](#).

#### DISASSEMBLY



1. Unified meter and A/C amp.
2. Bracket LH
3. AV control unit
4. Bracket RH

#### Removal and Installation

INFOID:000000004371872

#### REMOVAL

1. Remove display unit.
2. Remove AV control unit with a unified meter and A/C amp. as a single unit from the body.
3. Remove bracket screws, and then remove AV control unit.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

**Since AV control unit connector and unified meter and A/C amp. connector have the same form, be careful not to insert them wrongly.**

# DISPLAY UNIT

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## DISPLAY UNIT

### Exploded View

INFOID:000000004371873

Refer to [IP-12, "Exploded View"](#).

### Removal and Installation

INFOID:000000004371874

#### REMOVAL

1. Remove cluster lid D. Refer to [IP-12, "Exploded View"](#).
2. Remove display unit with bracket as a single unit.

#### INSTALLATION

Install in the reverse order of removal.

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# DOOR SQUAWKER

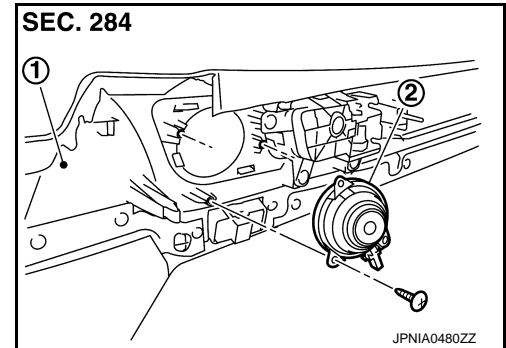
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## DOOR SQUAWKER

### Exploded View

INFOID:000000004371875



1. Door finisher assembly
2. Door squawker

### Removal and Installation

INFOID:000000004371876

#### REMOVAL

1. Remove door finisher assembly. Refer to [INT-12, "Exploded View"](#).
2. Remove door squawker from door finisher assembly.

#### INSTALLATION

Install in the reverse order of removal.

# DOOR WOOFER

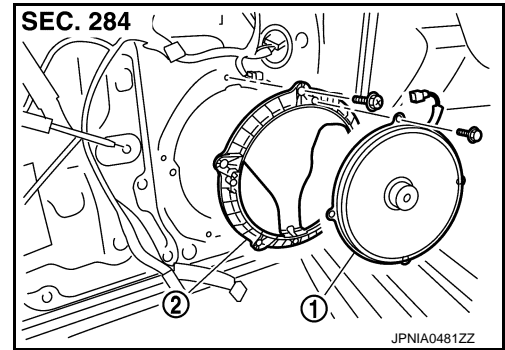
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## DOOR WOOFER

### Exploded View

INFOID:000000004371877



1. Door woofer
2. Woofer bracket

### Removal and Installation

INFOID:000000004371878

#### REMOVAL

1. Remove door finisher assembly. Refer to [INT-12, "Exploded View"](#).
2. Remove door woofer from woofer bracket.

#### INSTALLATION

Install in the reverse order of removal.

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# TWEETER

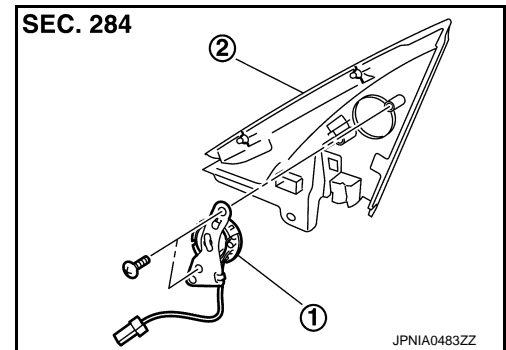
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## TWEETER

### Exploded View

INFOID:000000004371881



1. Tweeter
2. Corner cover

### Removal and Installation

INFOID:000000004371882

#### REMOVAL

1. Remove corner cover. Refer to [MIR-19. "DOOR MIRROR ASSEMBLY : Exploded View"](#).
2. Remove tweeter from corner cover.

#### INSTALLATION

Install in the reverse order of removal.

# CENTER SPEAKER

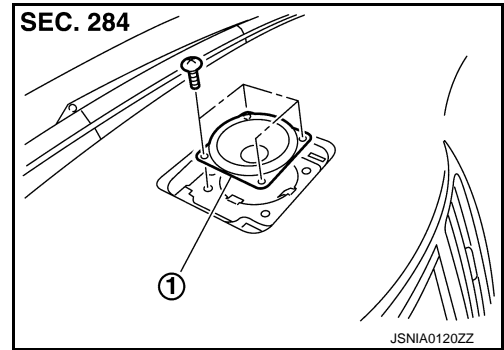
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## CENTER SPEAKER

### Exploded View

INFOID:000000004371883



1. Center speaker

### Removal and Installation

INFOID:000000004371884

#### REMOVAL

1. Remove upper grille, and then remove center speaker. Refer to [IP-12, "Exploded View"](#).

#### INSTALLATION

Install in the reverse order of removal.

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## REAR WOOFER

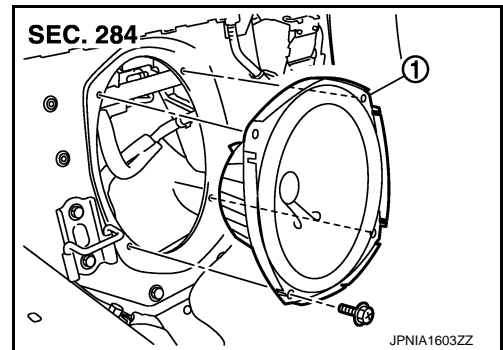
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

### REAR WOOFER

#### Exploded View

INFOID:000000004371885



1. Rear woofer

#### Removal and Installation

INFOID:000000004371886

##### REMOVAL

1. Remove rear seatback. Refer to [SE-246. "Exploded View"](#).
2. Remove rear woofer from the vehicle.

##### INSTALLATION

Install in the reverse order of removal.



# HEADREST SPEAKER

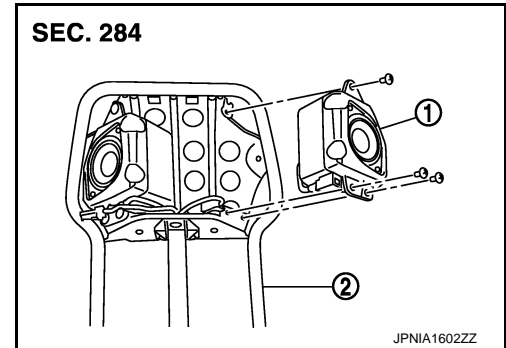
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## HEADREST SPEAKER

### Exploded View

INFOID:000000005106292



1. Headrest speaker
2. Headrest frame

### Removal and Installation

INFOID:000000005106293

#### REMOVAL

1. Remove headrest frame. Refer to [SE-223, "Exploded View"](#).
2. Remove headrest speaker screws, then disconnect headrest speaker connector and remove headrest speaker.

#### INSTALLATION

Install in the reverse order of removal.

A  
B  
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# BOSE AMP.

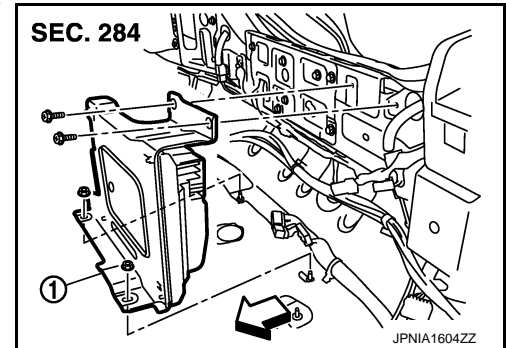
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## BOSE AMP.

### Exploded View

INFOID:000000004371887



1. BOSE amp.

⇐ Vehicle front

### Removal and Installation

INFOID:000000004371888

#### REMOVAL

1. Remove net guard bracket assembly. Refer to [INT-23, "Exploded View"](#).
2. Remove BOSE amp. from trunk room.

#### INSTALLATION

Install in the reverse order of removal.

# AUDIOPILOT® MICROPHONE

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## AUDIOPILOT® MICROPHONE

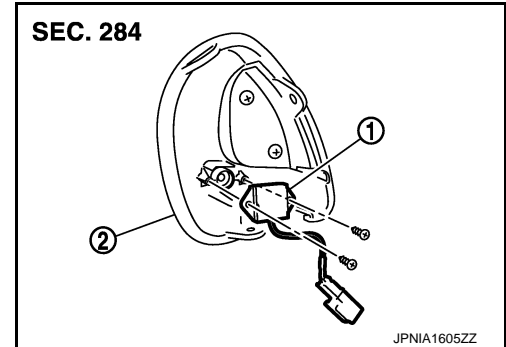
### Exploded View

INFOID:000000005106334

#### REMOVAL

Refer to [SE-223, "Exploded View"](#).

#### DISASSEMBLY



1. AudioPilot® microphone
2. Headrest inner grille

### Removal and Installation

INFOID:000000005106335

#### REMOVAL

1. Remove headrest inner grille. Refer to [SE-223, "Exploded View"](#).
2. Remove AudioPilot® microphone from headrest inner grille.

#### INSTALLATION

Install in the reverse order of removal.

A  
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# ANTENNA BASE

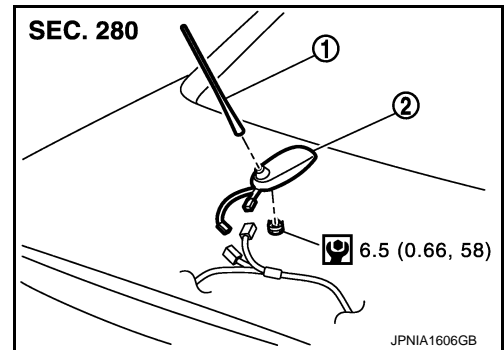
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## ANTENNA BASE

### Exploded View

INFOID:000000004931206



1. Antenna rod
2. Antenna base

Refer to [GI-4, "Components"](#) for symbols in the figure.

### Removal and Installation

INFOID:000000004931207

#### REMOVAL

1. Remove trunk lid finisher inner. Refer to [INT-26, "Exploded View"](#).
2. Remove antenna base mounting nut.
3. Remove antenna base.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

**Be careful about tightening torque. Antenna sensitivity becomes poor, and when it is excessive, trunk lid panel may be deformed, when antenna base mounting nut tightening torque is loose.**

# MULTIFUNCTION SWITCH

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## MULTIFUNCTION SWITCH

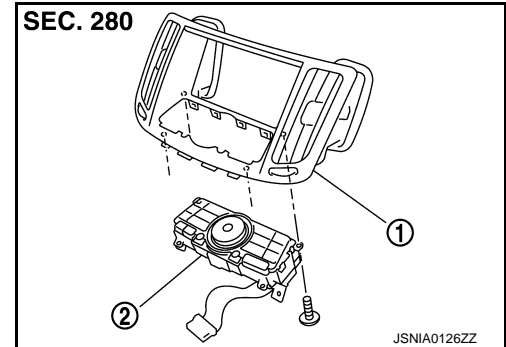
### Exploded View

INFOID:000000004371895

#### REMOVAL

Refer to [IP-12, "Exploded View"](#).

#### DISASSEMBLY



1. Center ventilator grille
2. Multifunction switch

### Removal and Installation

INFOID:000000004371896

#### REMOVAL

1. Remove cluster lid D. Refer to [IP-12, "Exploded View"](#).
2. Remove multifunction switch with center ventilator grille as a single unit.
3. Remove multifunction switch from center ventilator.

#### INSTALLATION

Install in the reverse order of removal.

A  
B  
C  
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E  
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AV

# PRESET SWITCH

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## PRESET SWITCH

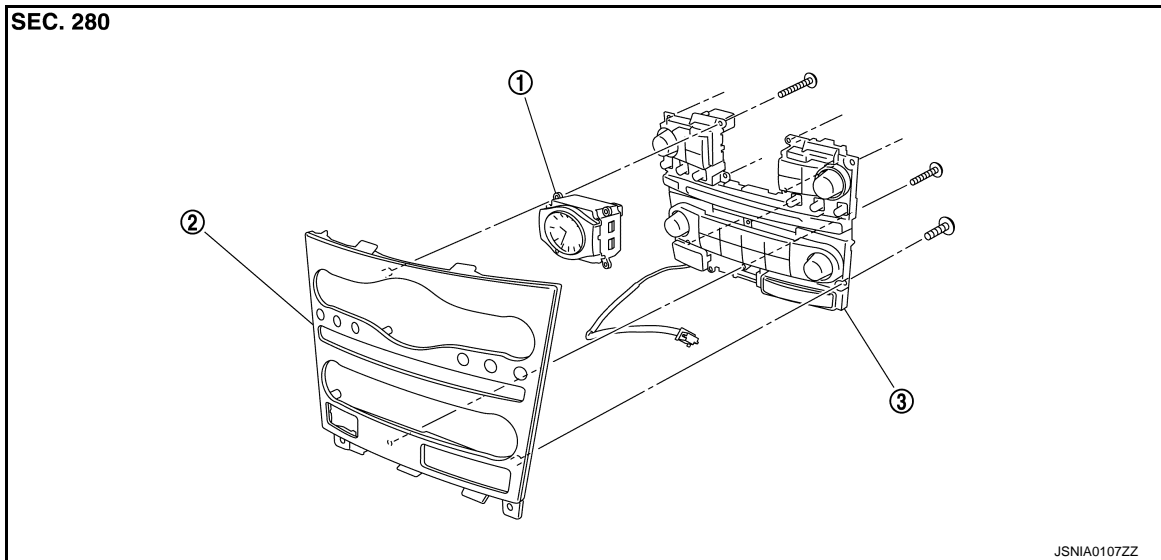
### Exploded View

INFOID:000000004371897

#### REMOVAL

Refer to [IP-12. "Exploded View"](#).

#### DISASSEMBLY



1. Clock

2. Cluster lid C

3. Preset switch

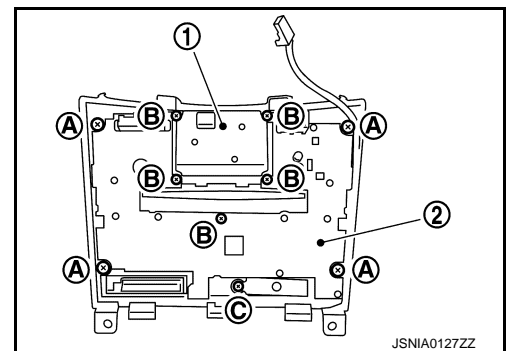
### Removal and Installation

INFOID:000000004371898

#### REMOVAL

1. Remove cluster lid C. Refer to [IP-12. "Exploded View"](#).
2. Remove preset switch (2) from cluster lid C.

- 1. Clock
- A. Screw
- B. Screw
- C. Screw



#### INSTALLATION

Install in the reverse order of removal.

#### NOTE:

When installing preset switch, do not allow the print wire that connects preset switch and multifunction switch to get caught in between AV control unit and preset switch.

# STEERING SWITCH

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## STEERING SWITCH

### Exploded View

INFOID:000000004371899

Refer to [ST-13. "Exploded View"](#).

### Removal and Installation

INFOID:000000004371900

#### REMOVAL

Refer to [ST-13. "Removal and Installation"](#).

#### INSTALLATION

Install in the reverse order of removal.

A

B

C

D

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# IPOD ADAPTER

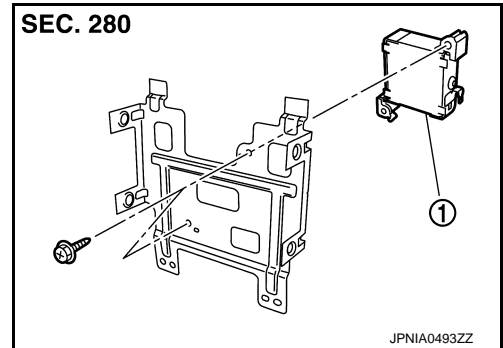
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## IPOD ADAPTER

### Exploded View

INFOID:000000004371901



1. iPod adapter

### Removal and Installation

INFOID:000000004371902

#### REMOVAL

1. Remove display assy. Refer to [AV-739, "Removal and Installation"](#).
2. Remove display from display bracket.
3. Remove iPod adapter from display bracket.

#### INSTALLATION

Install in the reverse order of removal.



# IPOD CONNECTOR

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## IPOD CONNECTOR

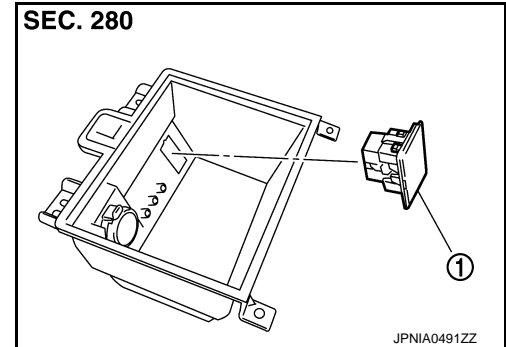
### Exploded View

INFOID:000000004371903

#### REMOVAL

Refer to [IP-24, "Exploded View"](#).

#### DISASSEMBLY



1. iPod connector

### Removal and Installation

INFOID:000000004371904

#### REMOVAL

1. Remove center console assembly. Refer to [IP-24, "Exploded View"](#).
2. Push the pawl from the back of center console to remove iPod connector.

#### INSTALLATION

Install in the reverse order of removal.

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# AUXILIARY INPUT JACKS

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## AUXILIARY INPUT JACKS

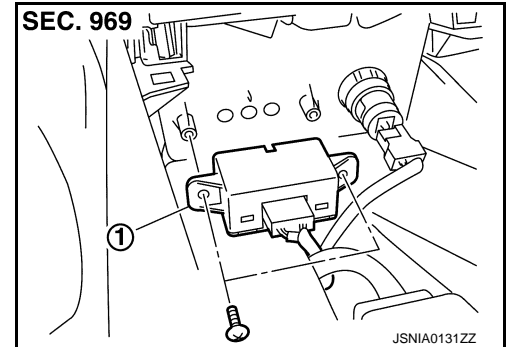
### Exploded View

INFOID:000000004371905

#### REMOVAL

Refer to [IP-24, "Exploded View"](#).

#### DISASSEMBLY



1. Auxiliary input jacks

### Removal and Installation

INFOID:000000004371906

#### REMOVAL

1. Remove center console assembly. Refer to [IP-24, "Exploded View"](#).
2. Remove auxiliary input jacks from center console assembly.

#### INSTALLATION

Install in the reverse order of removal.

# MICROPHONE

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## MICROPHONE

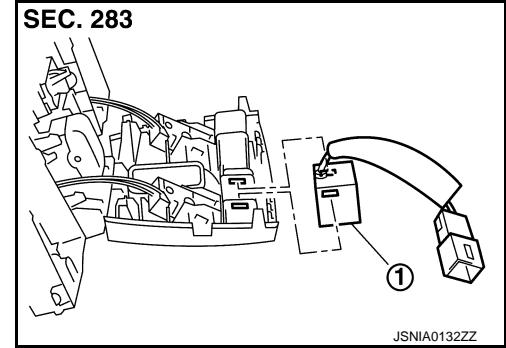
### Exploded View

INFOID:000000004371907

### REMOVAL

Refer to [INL-99. "Exploded View"](#).

### DISASSEMBLY



1. Microphone

### Removal and Installation

INFOID:000000004371908

### REMOVAL

1. Remove map lamp. Refer to [INL-99. "Exploded View"](#).
2. Remove microphone from map lamp.

### INSTALLATION

Install in the reverse order of removal.

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AV

# GPS ANTENNA

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

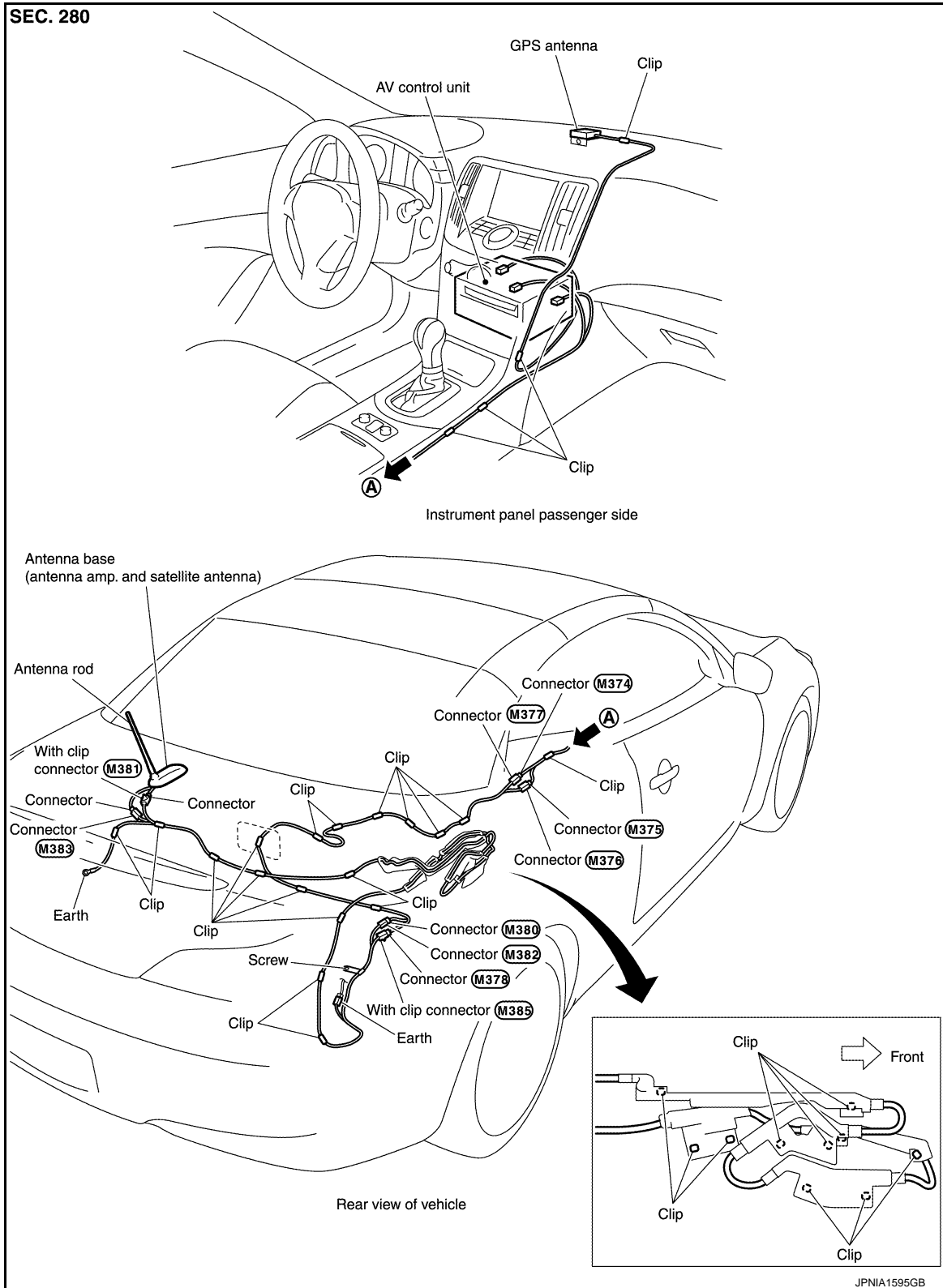
## GPS ANTENNA

Exploded View

INFOID:000000004371909

Harness Layout

INFOID:000000004371910



# GPS ANTENNA

< REMOVAL AND INSTALLATION >

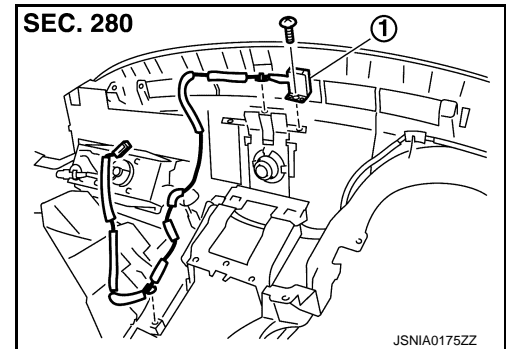
[BOSE AUDIO WITH NAVIGATION]

## Removal and Installation

INFOID:000000004371911

### REMOVAL

1. Remove instrument panel. Refer to [IP-12. "Exploded View"](#).
2. Remove GPS antenna (1) from instrument panel.



### INSTALLATION

Install in the reverse order of removal.

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# CAMERA CONTROL UNIT

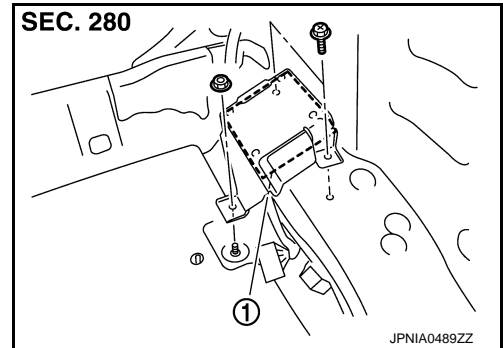
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## CAMERA CONTROL UNIT

### Exploded View

INFOID:000000004371912



1. Camera control unit

### Removal and Installation

INFOID:000000004371913

#### REMOVAL

1. Remove trunk floor spacer RH, and then remove camera control unit. Refer to [INT-23, "Exploded View"](#).

#### INSTALLATION

Install in the reverse order of removal.

### Adjustment

INFOID:000000004371914

#### ADJUSTMENT

There may be a misalignment of possible route line center position of rear view monitor after removing camera control unit. Therefore, correct neutral position with the following procedure.

1. Steer the steering wheel to the leftmost and rightmost ends.
2. Drive vehicle at 30 km/h (18.6 MPH) min. speed at least 100 m (328.1 ft).

# REAR VIEW CAMERA

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## REAR VIEW CAMERA

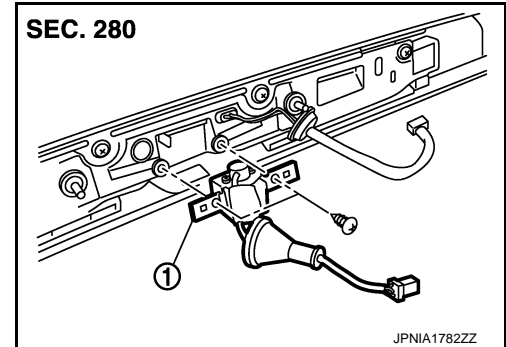
### Exploded View

INFOID:000000004371915

#### REMOVAL

Refer to [EXT-36, "Exploded View"](#).

#### DISASSEMBLY



1. Rear view camera

### Removal and Installation

INFOID:000000004371916

#### REMOVAL

1. Remove trunk lid finisher outer. Refer to [EXT-36, "Exploded View"](#).
2. Remove rear view camera from trunk lid finisher outer.

#### INSTALLATION

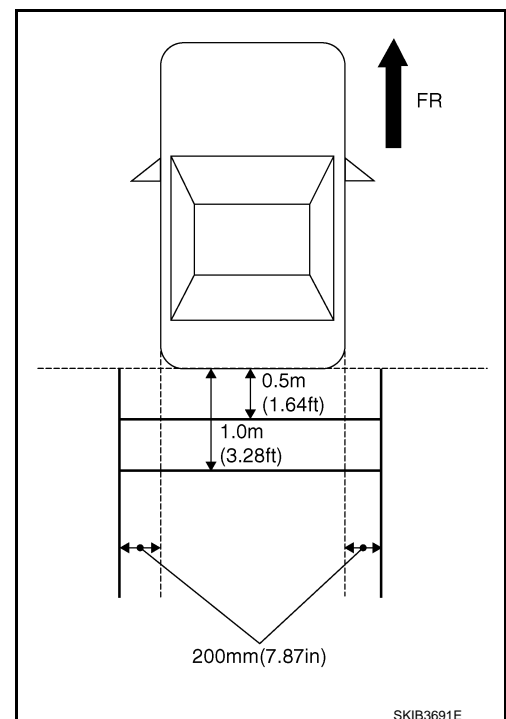
Install in the reverse order of removal.

### Adjustment

INFOID:000000004371917

Adjust the guide line position if the guide line position is shifted after installing the rear view camera.

1. Draw lines on rearward area of the vehicle passing through the following points: 200 mm (7.87 in) from both sides of the vehicle, and 0.5 m (1.64 ft), 1.0 m (3.28 ft) from the rear end of the bumper.
2. Set into "Adjust offset of rear view camera" mode of Confirmation / Adjustment mode.



## REAR VIEW CAMERA

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

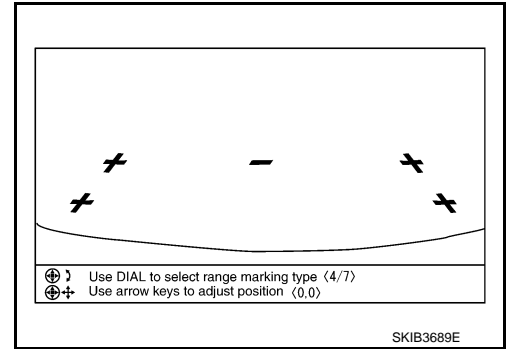
3. Rotate the center dial, and then select the guiding line pattern so that its angle is aligned with the correction line of the rear of the vehicle.

**Selected pattern : 7**

4. Make fine adjustment to the correction line of the rear of the vehicle with up/down/left/right switches so that its position is aligned with the guiding line. Press "OK" switch and record the adjusted guiding line position to the camera control unit.

**Up/Down adjustment range : -20 - 20**

**Left/Right adjustment range : -20 - 20**



### CAUTION:

Never operate other function such as pressing BACK while writing index data.

If Confirmation/Adjustment mode does not function in the above procedure, perform one of the following service to adjust the index again.

- Remove battery for five min. Then reconnect battery.
- Remove camera control unit connector for five min. Then reconnect camera control unit connector.



# STEERING ANGLE SENSOR

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## STEERING ANGLE SENSOR

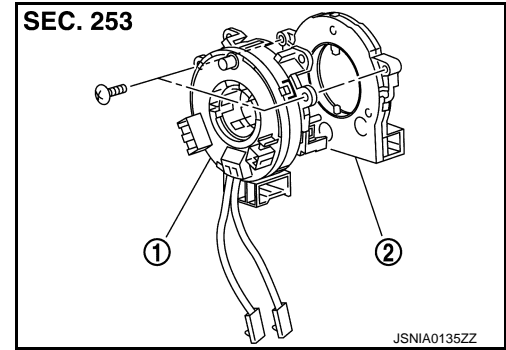
### Exploded View

INFOID:000000004371918

### REMOVAL

Refer to [SR-14, "Exploded View"](#).

### DISASSEMBLY



1. Spiral cable
2. Steering angle sensor

### Removal and Installation

INFOID:000000004371919

### REMOVAL

1. Remove spiral cable.
2. Remove steering angle sensor from spiral cable.

### INSTALLATION

Install in the reverse order of removal.

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# ANTENNA FEEDER (RADIO)

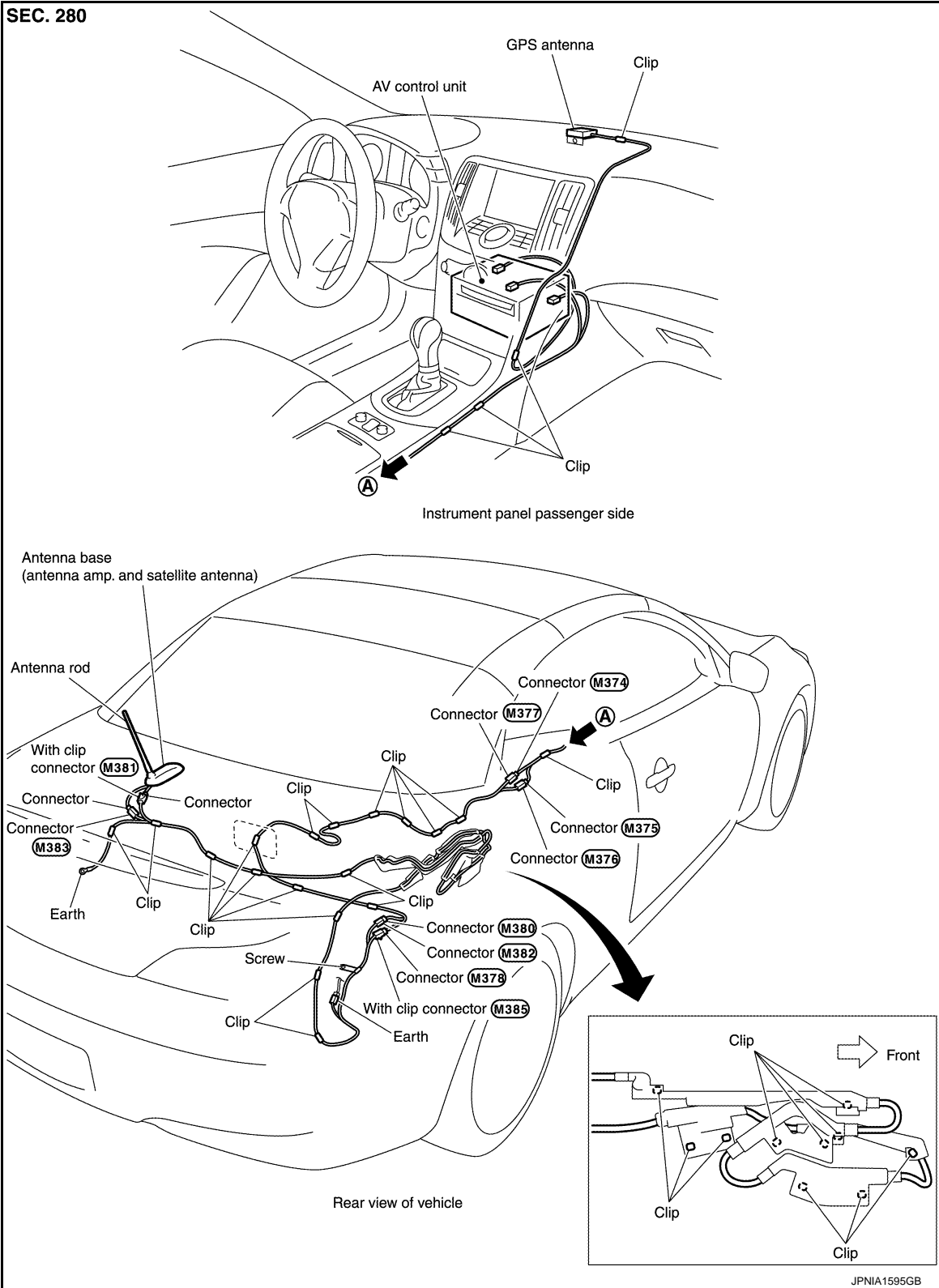
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## ANTENNA FEEDER (RADIO)

### Harness Layout

INFOID:000000005096893



# ANTENNA FEEDER (SATELLITE RADIO)

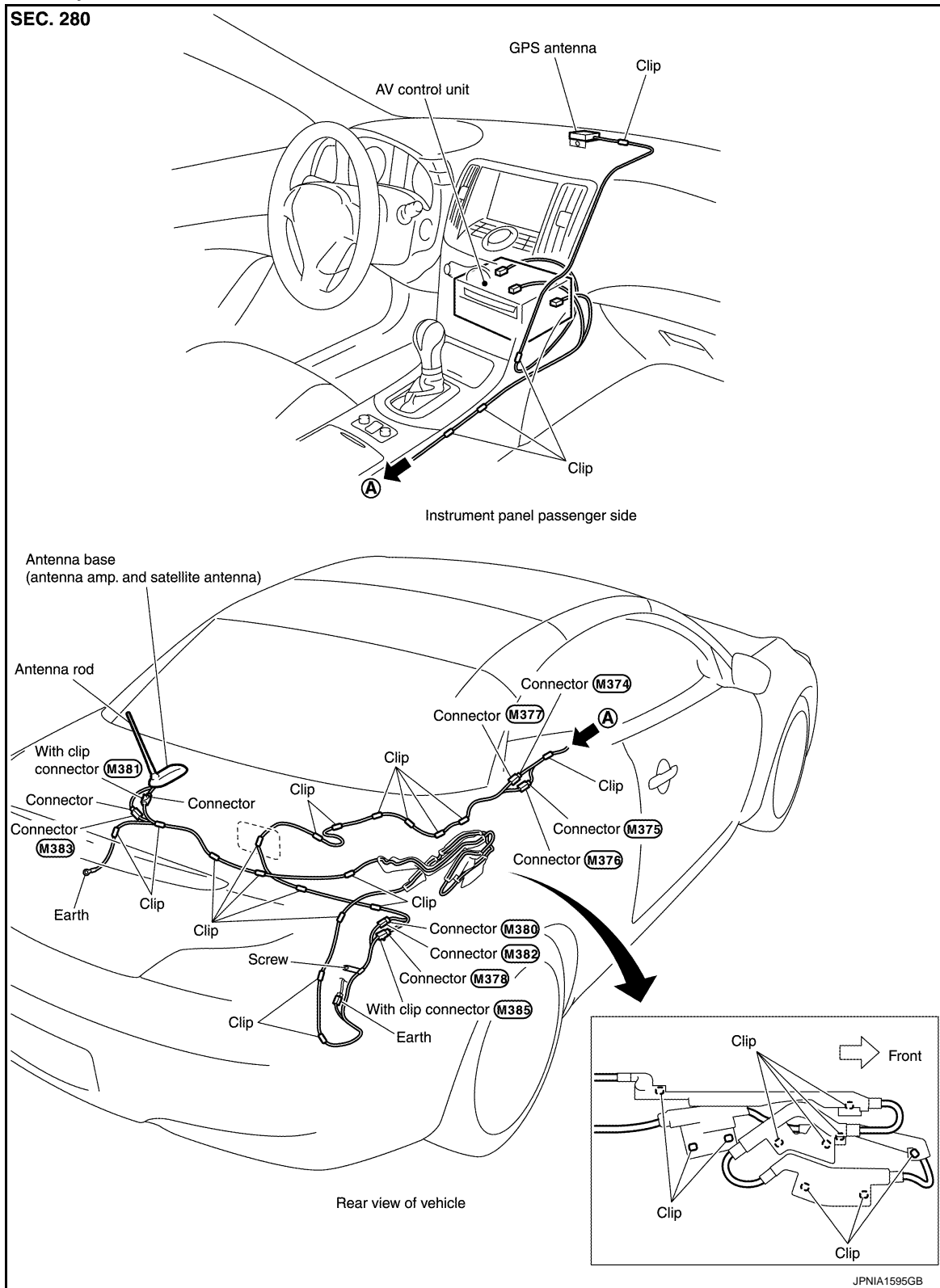
< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## ANTENNA FEEDER (SATELLITE RADIO)

### Harness Layout

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# ANTENNA FEEDER (GPS)

< REMOVAL AND INSTALLATION >

[BOSE AUDIO WITH NAVIGATION]

## ANTENNA FEEDER (GPS)

### Harness Layout

INFOID:000000005096895

